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Atlas of Physical Oceanographic Data for Current Surge Studies on the Grand Bank of Newfoundland: 1985

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90-02160/

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ABSTRACT

Sandstrom, H. and J.A. Elliott. 1989. Atlas of physical oceanographic data for current surge studies on the Grand Banks of Newfoundland: 1985. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 121: 4 + 472 pp.

Physical oceanographic data are presented for *CSS DAWSON* cruise 85-024. Included are the results of CTD casts, moored current meters, BATFISH tows, acoustic backscattering charts and Doppler current profiler. The area of the cruise is in the vicinity and to the east of the Hibernia site on the Grand Banks along 47°N.

RÉSUMÉ

Sandstrom, H. and J.A. Elliott. 1989. Atlas of physical oceanographic data for current surge studies on the Grand Banks of Newfoundland: 1985. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 121: 4 + 472 pp.

On présente des données d'océanographie physique recueillies lors de la mission 84-034 du *NSC DAWSON*. Les résultats fournis proviennent de sondes CTP, de courantomètres, de remorquages du BATFISH, de cartes de rétrodiffusion acoustique et de profileurs de courant Doppler. La mission en question se déroulait sur les Grands Bancs, aux alentours et à l'est d'Hibernia, par 47° de latitude nord.

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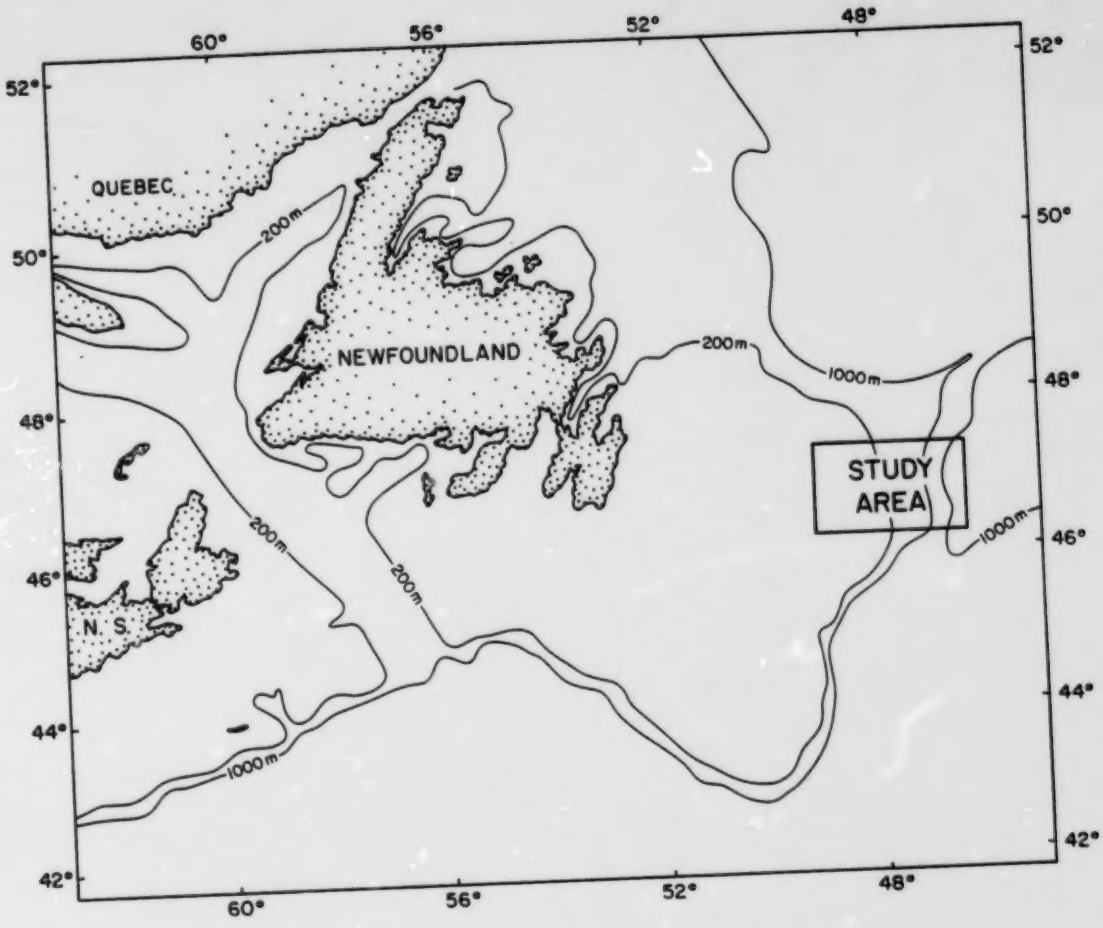
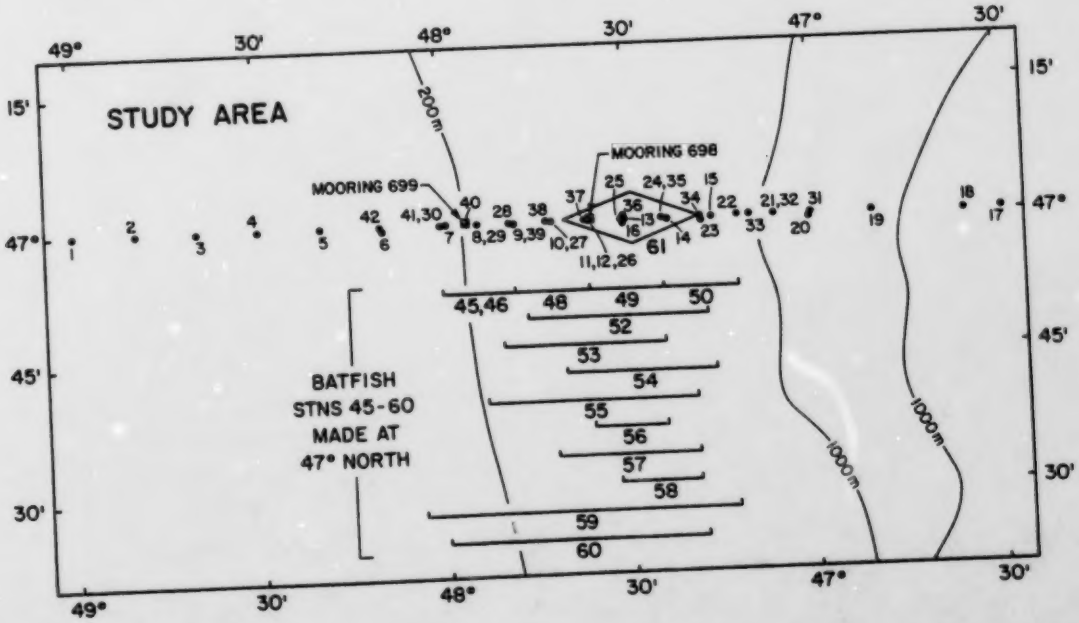

60°
56°
52°
48°
52°
50°
48°
46°
44°
42°
QUEBEC
NEWFOUNDLAND
N. S.
200m
1000m
STUDY AREA


49°
30'
48°
47°
15'
45'
STUDY AREA
200m
1000m
MOORING 698
MOORING 699
BATFISH
STNS 45-60
MADE AT
47° NORTH
61

1.0 INTRODUCTION

This is the fourth in a series of atlases prepared for a program supported by PERD funding to study the incidence of tidally generated large amplitude internal waves and associated current surges along east coast continental shelves. The previous atlases reported on data from Scotian Shelf. The present one covers *CSS DAWSON* cruise 85-024 to the edge of the Grand Banks in the vicinity and to the east of the Hibernia exploration area. The field data were collected near the shelf edge and extending into Flemish Pass centered on 47°N latitude (see Figure).

The program was conducted from *CSS DAWSON* over the period August 13-28, 1985. Two moorings were deployed and recovered. CTD, BATFISH, Ametek Straza Acoustic Doppler Current Profiler, and 12 kHz Raytheon Sounder equipment were operated from the ship. SLAR (Side Looking Aperture Radar) flights during summer of 1984 had indicated the presence of groups of high amplitude internal waves near the shelf edge, similar to those on the Scotian Shelf studied during earlier cruises. The principal objectives of this cruise were to study the nature of the internal tide and the short waves and to compare the process to that in the Scotian Gulf (Atlases 1 and 2 in this series) and near the Gully (Atlas 3), being cognizant of the contrasting density profiles and bathymetry.

2.0 INSTRUMENTATION AND DATA REDUCTION

All data are presented in GMT and Julian calendar.

2.1 CTD

The instrument used was a Guildline Digital CTD mounted on a rosette. Two bottle samples were taken from each CTD cast. Both temperatures and salinities were adjusted. Based on 80 calibration points, the standard deviations were 0.028°C for temperature and 0.012‰ for salinity. Standard processing using STPIN converted the raw CTD data into decimated form at 1 db bins by pressure sorting. In addition to conversion to physical units,

STPIN performed range checks and despiked the data. Adjusted calibrations, using STPROC, were temperature $\Delta T = -0.032°C$ and salinity, $\Delta S = 0.012‰$. Expected accuracy is $\pm 0.005°C$, $\pm 0.01‰$, ± 1 db, and ± 0.01 in σ_t.

2.2 Current Meters

Moorings 698 and 699 were deployed on August 18 and recovered on August 25, 1985. The moorings were standard AOL single point moorings with ground line and separate surface markers. The Fairey floats were placed at about 15 m below the surface. Mooring 698 had four current meters at depths of 17, 32, 137 and 177 m. Mooring 699 had three current meters at 19, 34 and 139 m srespectively. All of the current meters were of the Aanderaa type, set to sample at 2 minute intervals. Standard AOL data translation, checking, despiking and processing were carried out, using manufacturer's speed calibrations. Accuracy is approximately $\pm 2\%$ of speed. Compass calibrations performed in the laboratory just prior to the cruise were applied to direction data taken as the mean of successive readings. Direction errors are about $\pm 5°$.

The current meter at 137 m depth at mooring 698 had apparent rotor problems on recovery and no usable speed record is available for this meter.

2.3 BATFISH

The system consisted of the standard narrow winged version with a digital CTD. It was towed almost continuously for seven days; the first three days the cycling was over depth range of 10 to 100 m, after that from 10 m to 40 m, where most of the density change occurred. Thus a high horizontal sampling rate was possible at a typical speed of the ship of 8 knots (15 km/hr) and a climb-dive rate of 2 m/second. Data processing was similar to the CTD data procedures. Final contoured plots of T, S and σ_t were generated by an automated contouring routine. The program used is a modified version of SECCON (Section Contouring). This is a part of the CONMAP (Contour Mapping) System used at MEDS. Changes were made so that

the routine could read the CM formatted data. In presenting the data it was found necessary to break up long sections of data into shorter pieces. Standard accuracy for the BATFISH sensors is S = ±0.05‰, T = 0.02°C, P = ±2db, and σ_t = ±0.05 (Bennett, personal comm.). The expected scalar resolution is about ±1 m (Bennett and Huaide, 1986).

2.4 Ametek Straza Acoustic Doppler Current Profiler

The unit was mounted on the hull of CSS DAWSON. Some problems occurred early in the cruise, causing erratic performace until about August 17. After this the system seemed to work satisfactorily. The system was left in the 'ALTERNATE' mode for the entire cruise, bottom tracking in shallow water, but losing it when the water depth exceeded about 325 m. Since we were crossing from shallow to deep water frequently, this was thought to be the best approach, in as much as the system resumed bottom tracking without difficulty as the water shallowed. The portions of data when bottom tracking was lost are marked on plots. Data were collected as averages over about 8 minutes, with typically a 10 minute repeat cycle.

2.5 Acoustics

Data presented are reproductions of the original dry paper field recordings of acoustic backscattering observed by the standard configuration of the 12 kHz Raytheon PTR Sounder. Intermittent difficulties with this unit were encountered throughout the cruise, with some loss of data, and some data of uncertain quality.

3.0 CRUISE 85-024 - OVERVIEW

Based on the experience gained from work on the Scotian Shelf, the Hibernia program was designed to study the processes of generation of internal tide and the large amplitude internal waves. The large scale density field was obtained by occupying a long section along 47°N, including portions of the shelf, shelf edge and the Flemish Pass. The BATFISH survey was conducted in one of two modes: 1) repeated sections over a tidal cycle;

these are stations 45-50, and 61, and 2) tracking internal tide and short groups of waves along the E-W sections, following patterns as they propagated towards west; these are stations 52-60. Two moorings were placed for the duration of the cruise along 47°N, at 47°35'W and 47°55'W.

REFERENCES

Bennett, A.S. and T. Huaide. 1986. CTD time constant connection, Deep-Sea Res., 33(10): 1425-38.

Cruise Report 85-024, *CSS DAWSON*, Hibernia-Grand Banks, August 13-28. 1985. BIO, AOL, Dartmouth, N.S.

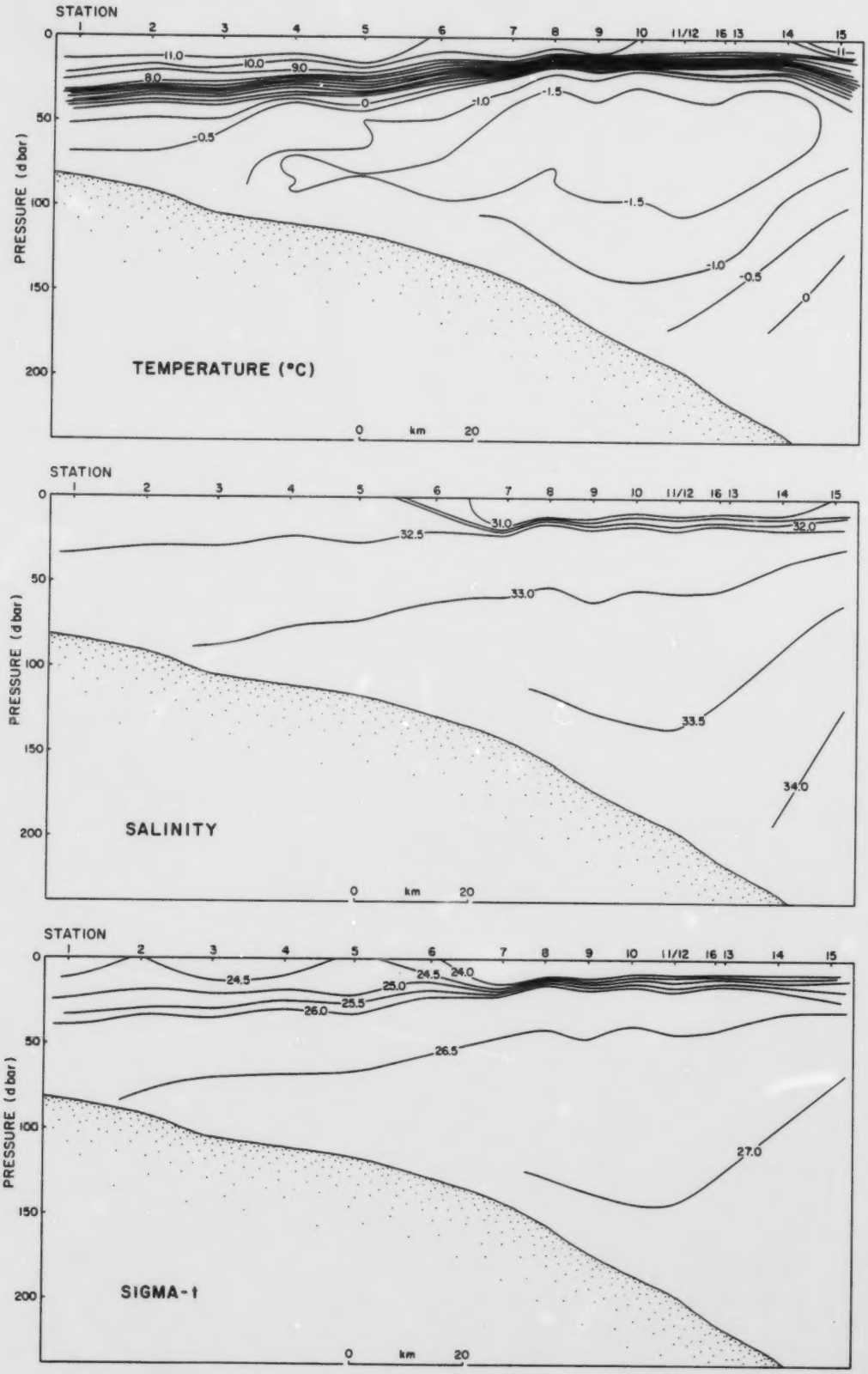
Sandstrom, H. and J.A. Elliott. 1986. Atlas of Physical Oceanographic Data for Current Surge Studies on the Scotian Shelf: 1980-82. Can. Tech. Rept. Hydrogr. Ocean. Sci. No. 77: iii + 216 pp.

Sandstrom, H. and J.A. Elliott. 1989. Atlas of Physical Oceanographic Data for Current Surge Studies on the Scotian Shelf: 1983. Can. Tech. Rept. Hydrogr. Ocean. Sci. No. 114: iv + 379 pp.

Sandstrom, H. and J.A. Elliott. 1989. Atlas of Physical Oceanographic Data for Current Surge Studies near The Gully: 1984. Can. Tech. Rept. Hydrogr. Ocean. Sci. No. 117: iv + 304 pp.

Figures 1-8

East-West CTD sections of Temperature, Salinity and Sigma-t for 85-024. The station locations are shown in the study area map as part of the introduction. The upper part of the water column is shown on an expanded vertical scale.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1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (d bar)
0 50 100 150 200
11.0
10.0
9.0
8.0
0
-0.5
-1.0
-1.5
TEMPERATURE (°C)
0 km 20
STATION
1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (d bar)
0 50 100 150 200
31.0
32.5
32.0
33.0
33.5
34.0
SALINITY
0 km 20
STATION
1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (d bar)
0 50 100 150 200
24.5
24.0
25.0
25.5
26.0
26.5
27.0
SIGMA-t
0 km 20

Fig. 1

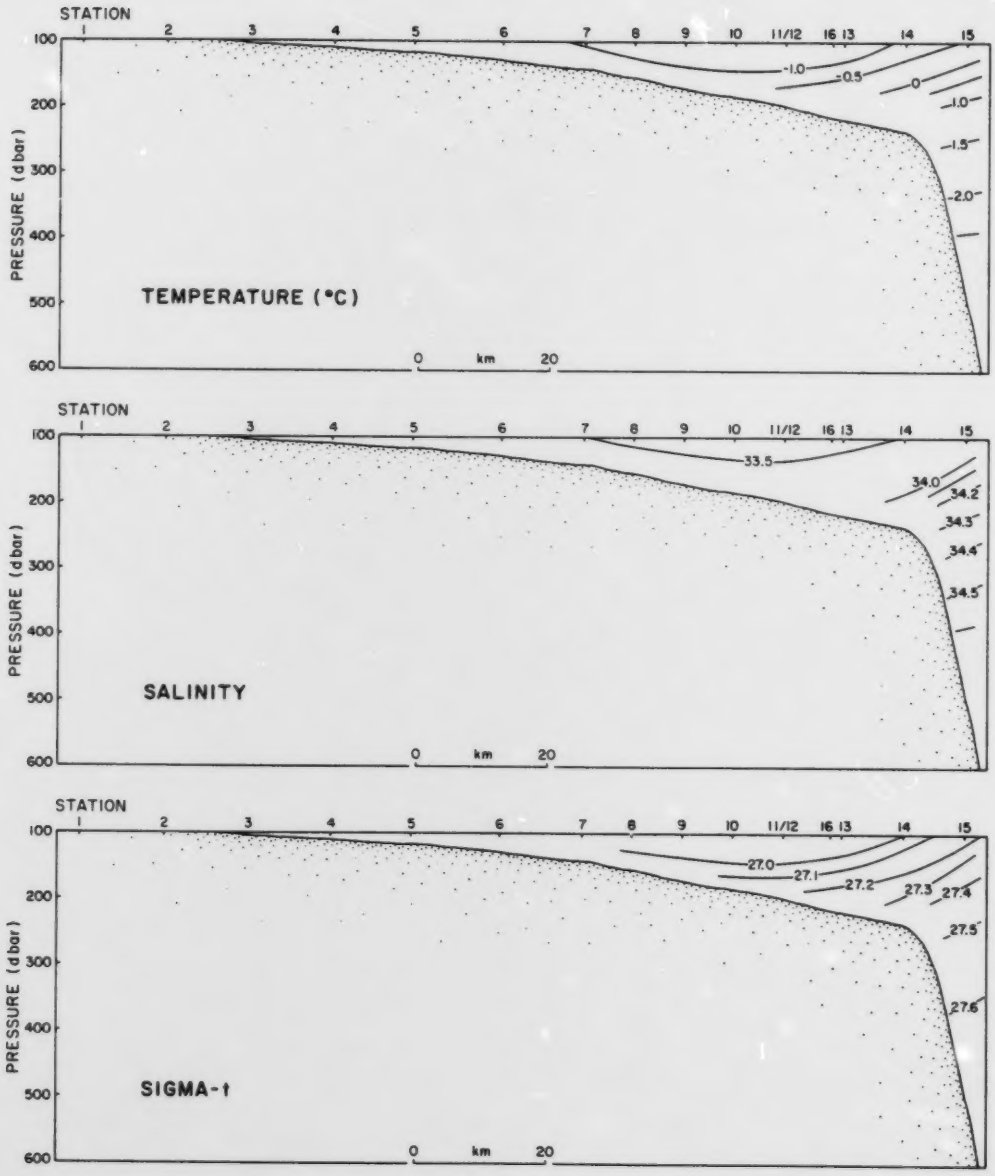
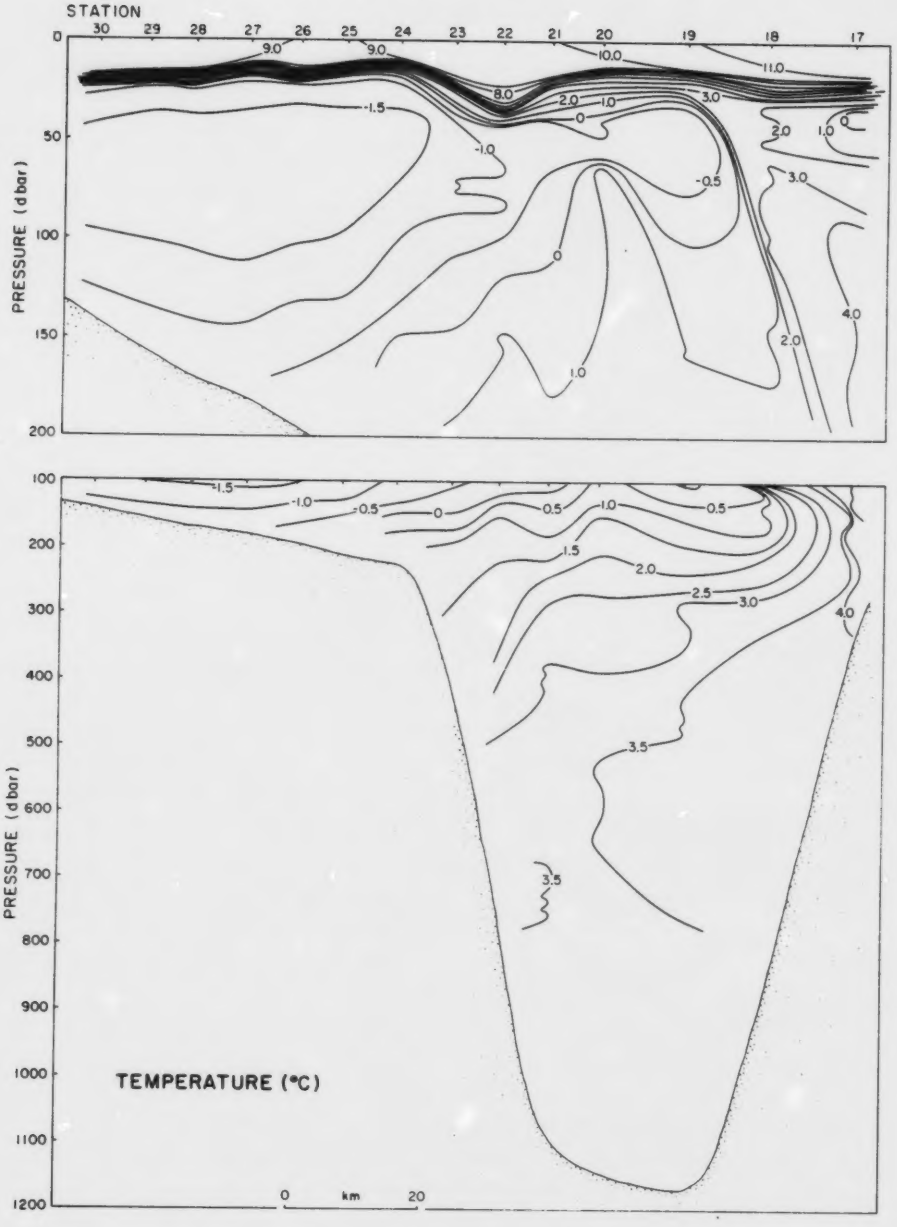

STATION
1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (dbar)
100 200 300 400 500 600
-1.0 -0.5 0 1.0 1.5 2.0
TEMPERATURE (°C)
0 km 20
STATION
1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (dbar)
100 200 300 400 500 600
33.5 34.0 34.2 34.3 34.4 34.5
SALINITY
0 km 20
STATION
1 2 3 4 5 6 7 8 9 10 11/12 16 13 14 15
PRESSURE (dbar)
100 200 300 400 500 600
27.0 27.1 27.2 27.3 27.4 27.5 27.6
SIGMA-t
0 km 20

Fig 2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30 29 28 27 26 25 24 23 22 21 20 19 18 17
PRESSURE (dbar)
TEMPERATURE (°C)
0 km 20

Fig. 3

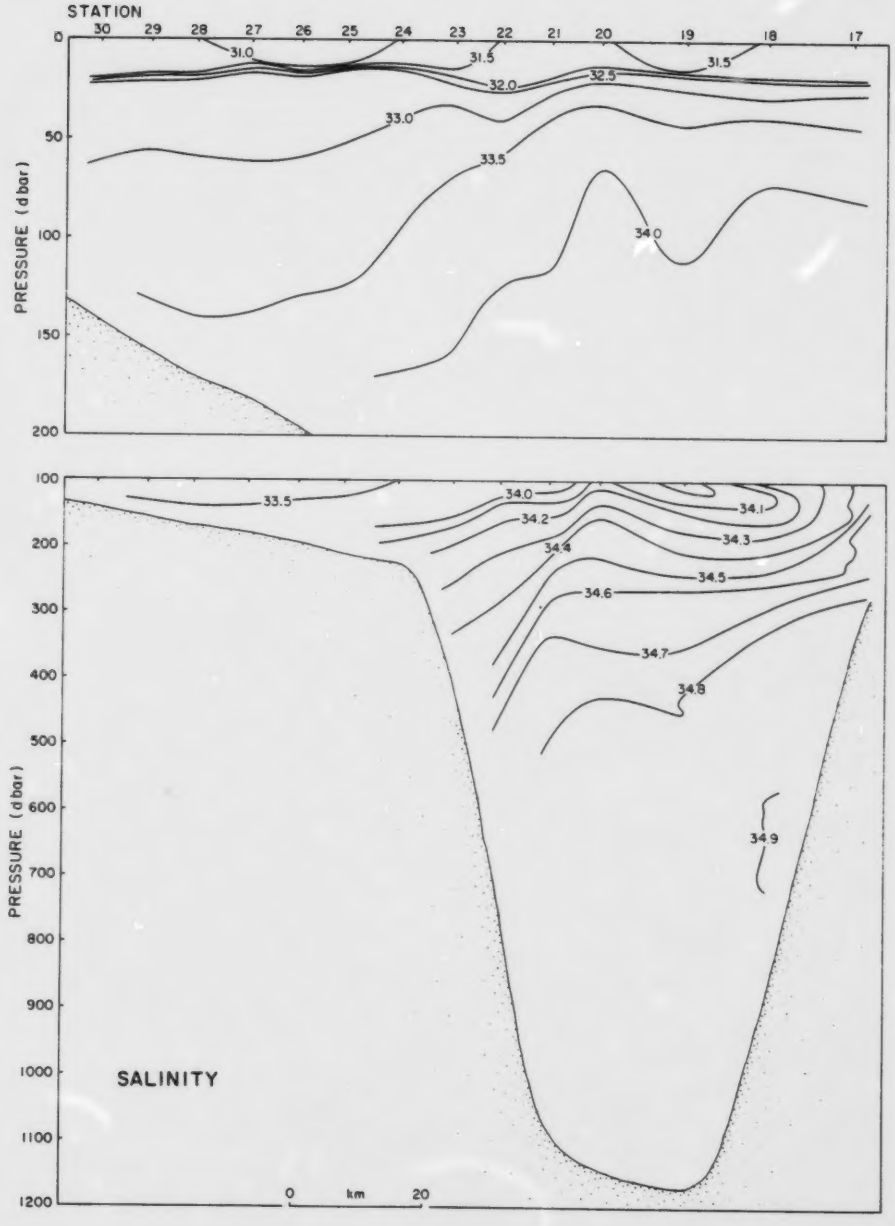

STATION
30 29 28 27 26 25 24 23 22 21 20 19 18 17
0
50
100
150
200
PRESSURE (dbar)
31.0
31.5
32.0
32.5
33.0
33.5
34.0
31.5
100
200
300
400
500
600
700
800
900
1000
1100
1200
PRESSURE (dbar)
33.5
34.0
34.1
34.2
34.3
34.4
34.5
34.6
34.7
34.8
34.9
SALINITY
0 km 20

Fig 4

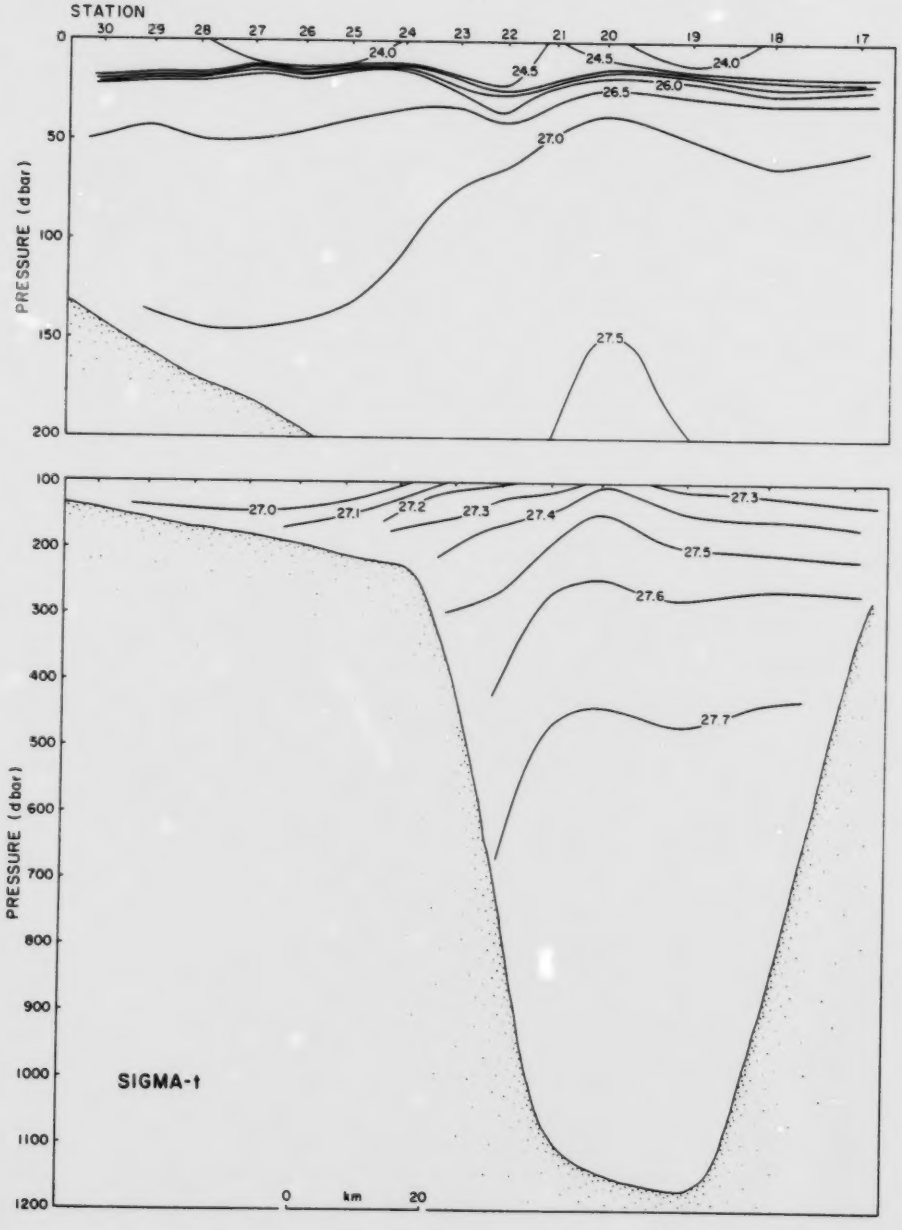

STATION
30 29 28 27 26 25 24 23 22 21 20 19 18 17
0
50
100
150
200
PRESSURE (d bar)
24.0
24.5
24.5
24.0
26.5
26.0
27.0
27.5
100
200
300
400
500
600
700
800
900
1000
1100
1200
PRESSURE (d bar)
27.0
27.1
27.2
27.3
27.4
27.3
27.5
27.6
27.7
SIGMA-t
0 km 20

Fig. 5

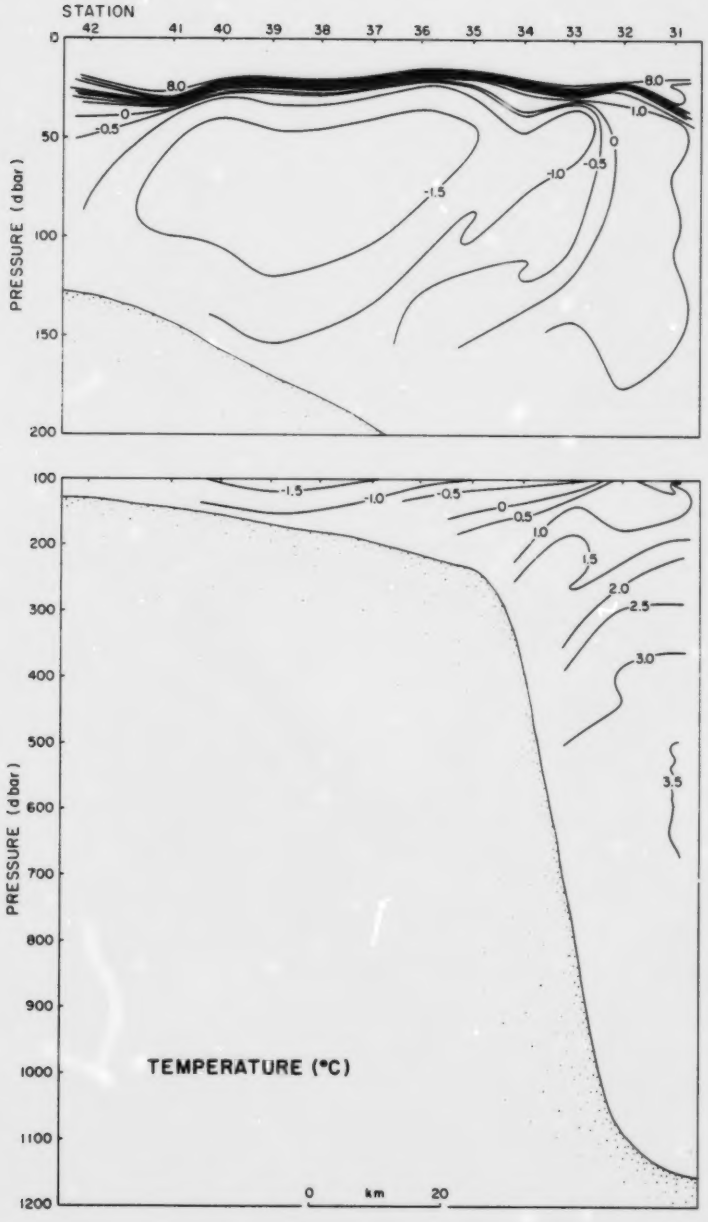

STATION
42
41
40
39
38
37
36
35
34
33
32
31
PRESSURE (dbar)
TEMPERATURE (°C)
0
km
20

Fig. 6

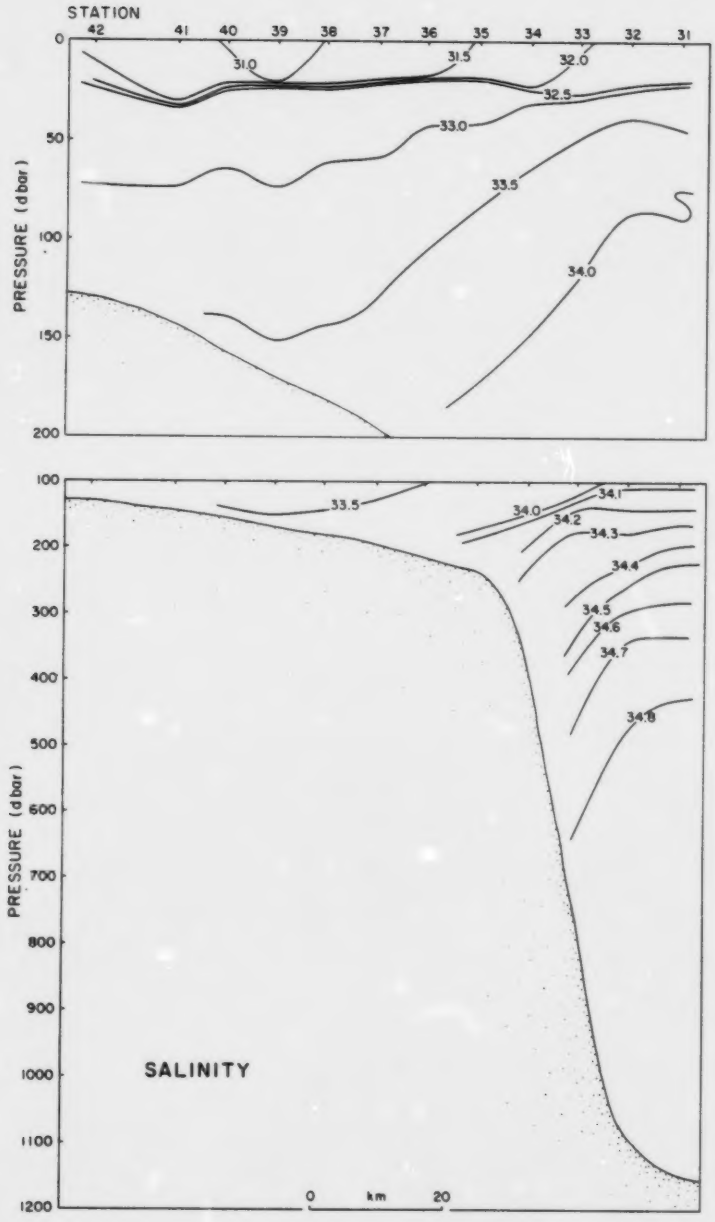

STATION
42
41
40
39
38
37
36
35
34
33
32
31
0
50
100
150
200
PRESSURE (dbar)
31.0
31.5
32.0
32.5
33.0
33.5
34.0
100
200
300
400
500
600
700
800
900
1000
1100
1200
PRESSURE (dbar)
33.5
34.0
34.1
34.2
34.3
34.4
34.5
34.6
34.7
34.8
SALINITY
0
km
20

Fig. 7

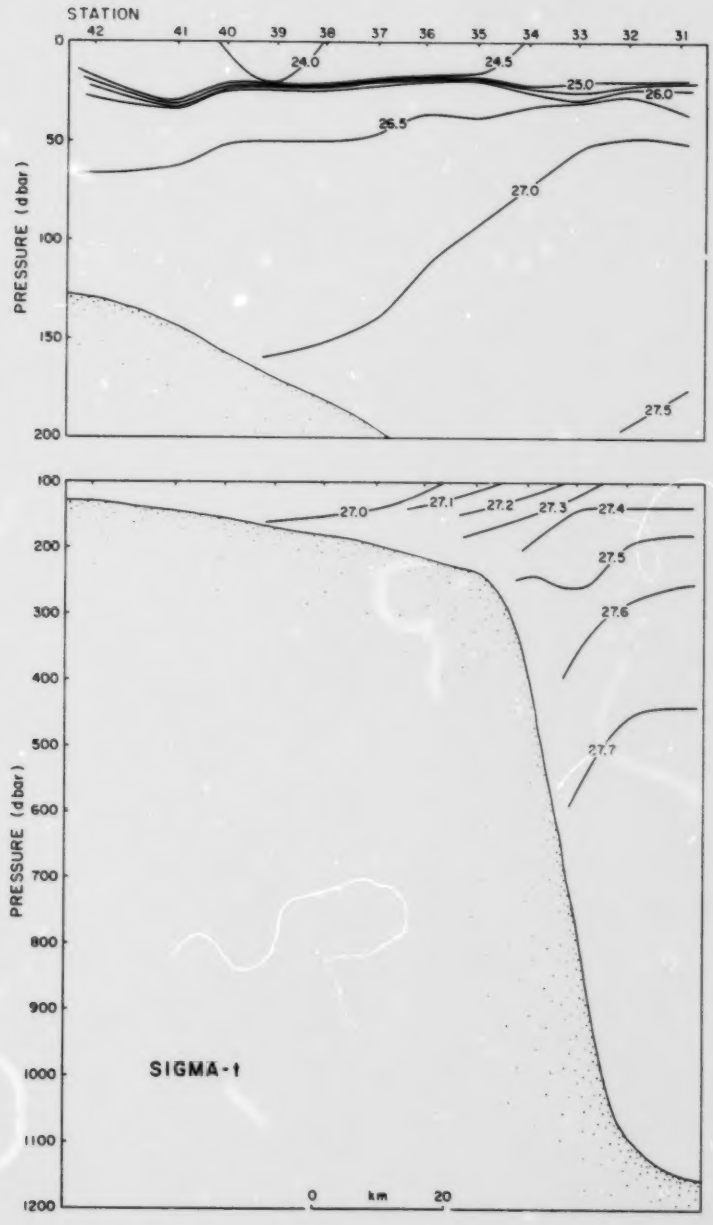

STATION
42
41
40
39
38
37
36
35
34
33
32
31
0
24.0
24.5
25.0
26.0
26.5
27.0
27.5
50
100
150
200
PRESSURE (dbar)
100
27.0
27.1
27.2
27.3
27.4
27.5
27.6
27.7
200
300
400
500
600
700
800
900
1000
1100
1200
PRESSURE (dbar)
SIGMA-t
0
km
20

Fig. 8

Figures 9-26

R(ate), D(irection), U (east component), V(north component) of current, progressive vector and current vector plots for current meter moorings 698 (46°59'.7N, 47°35'.7W) and 699 (47°00'.0N, 47°54'.9W).

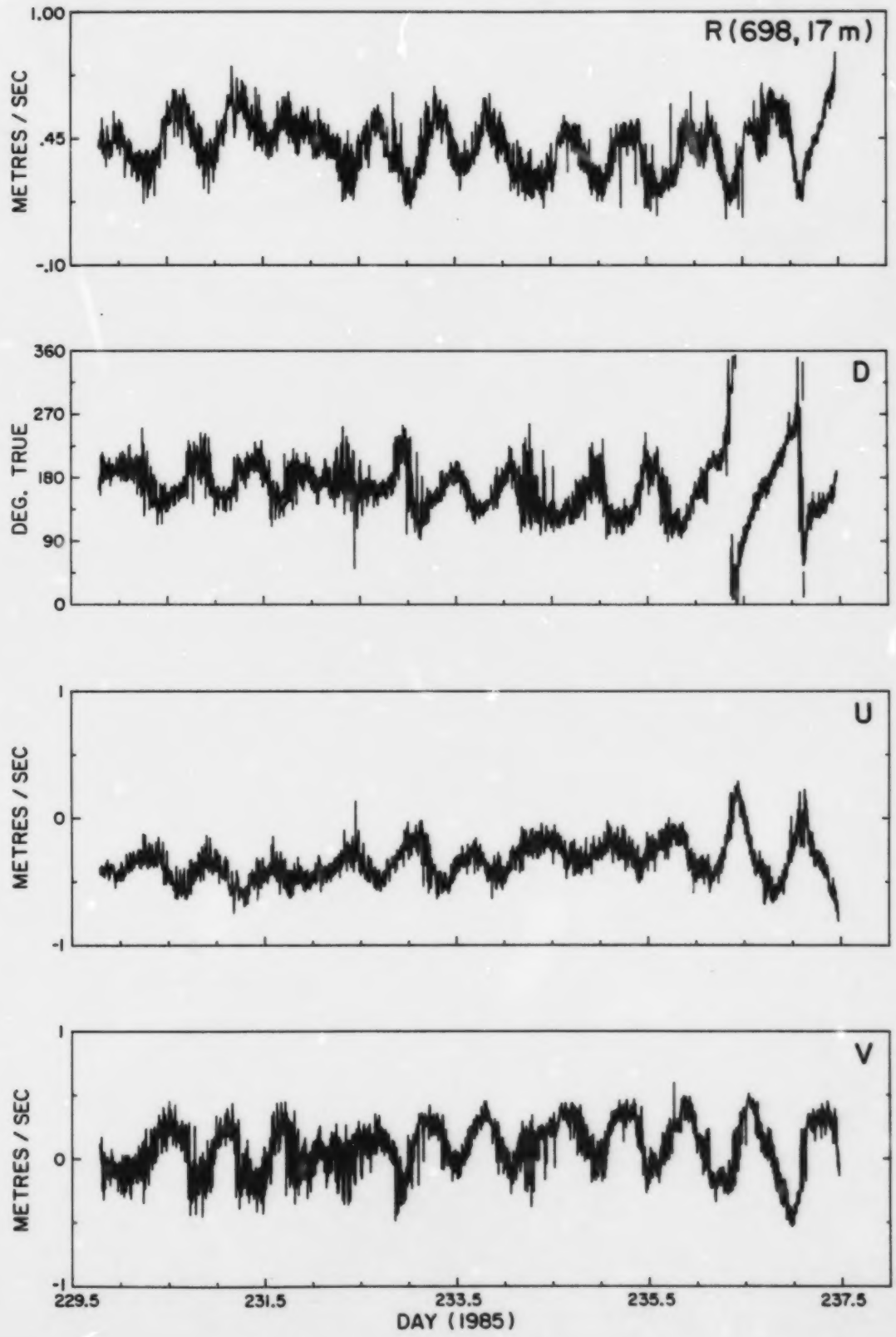

R(698, 17 m)
METRES / SEC
1.00
.45
-.10
D
DEG. TRUE
360
270
180
90
0
U
METRES / SEC
1
0
-1
V
METRES / SEC
1
0
-1
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig. 9

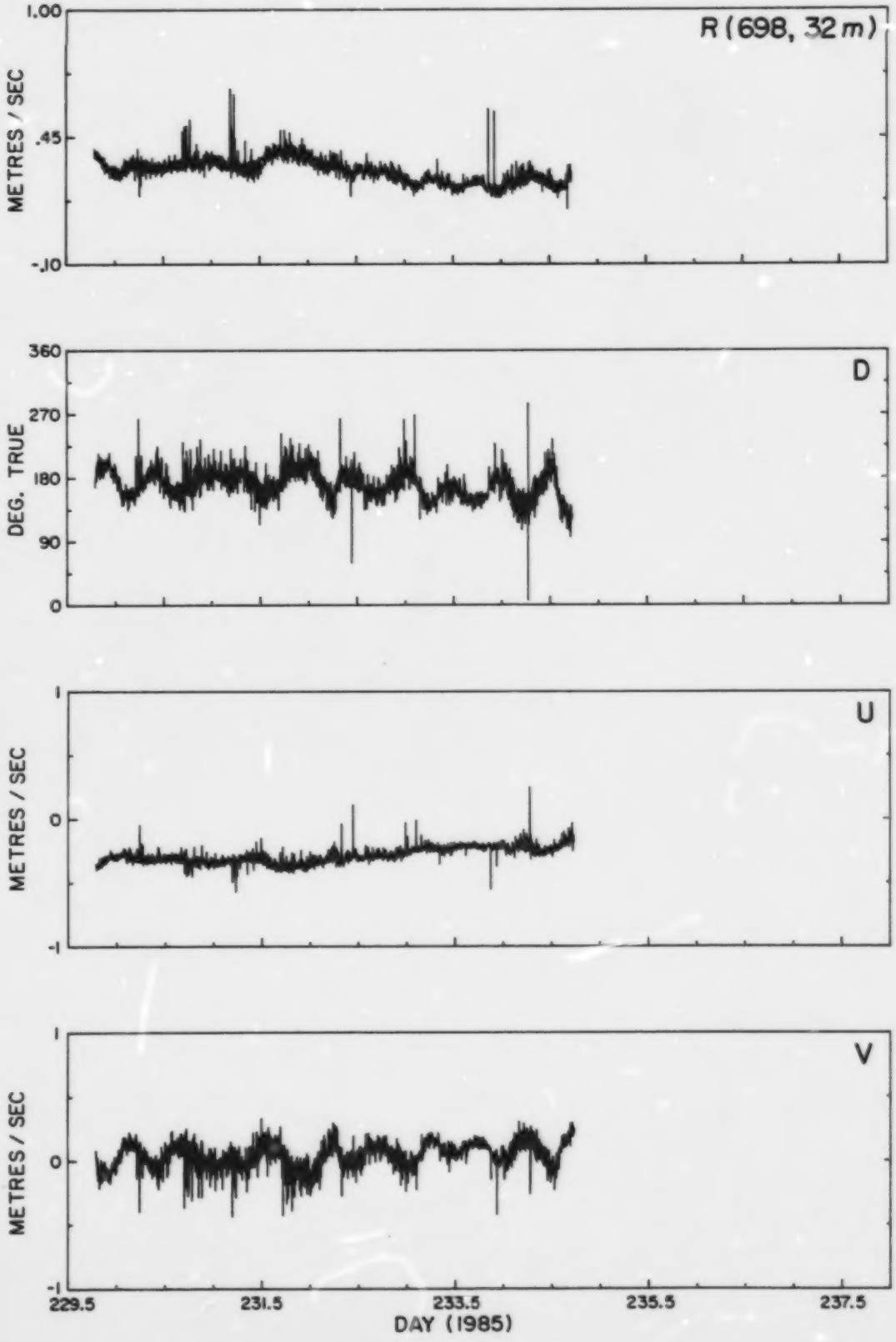

R (698, 32 m)
METRES / SEC
1.00
.45
-.10
D
DEG. TRUE
360
270
180
90
0
U
METRES / SEC
1
0
-1
V
METRES / SEC
1
0
-1
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig. 10

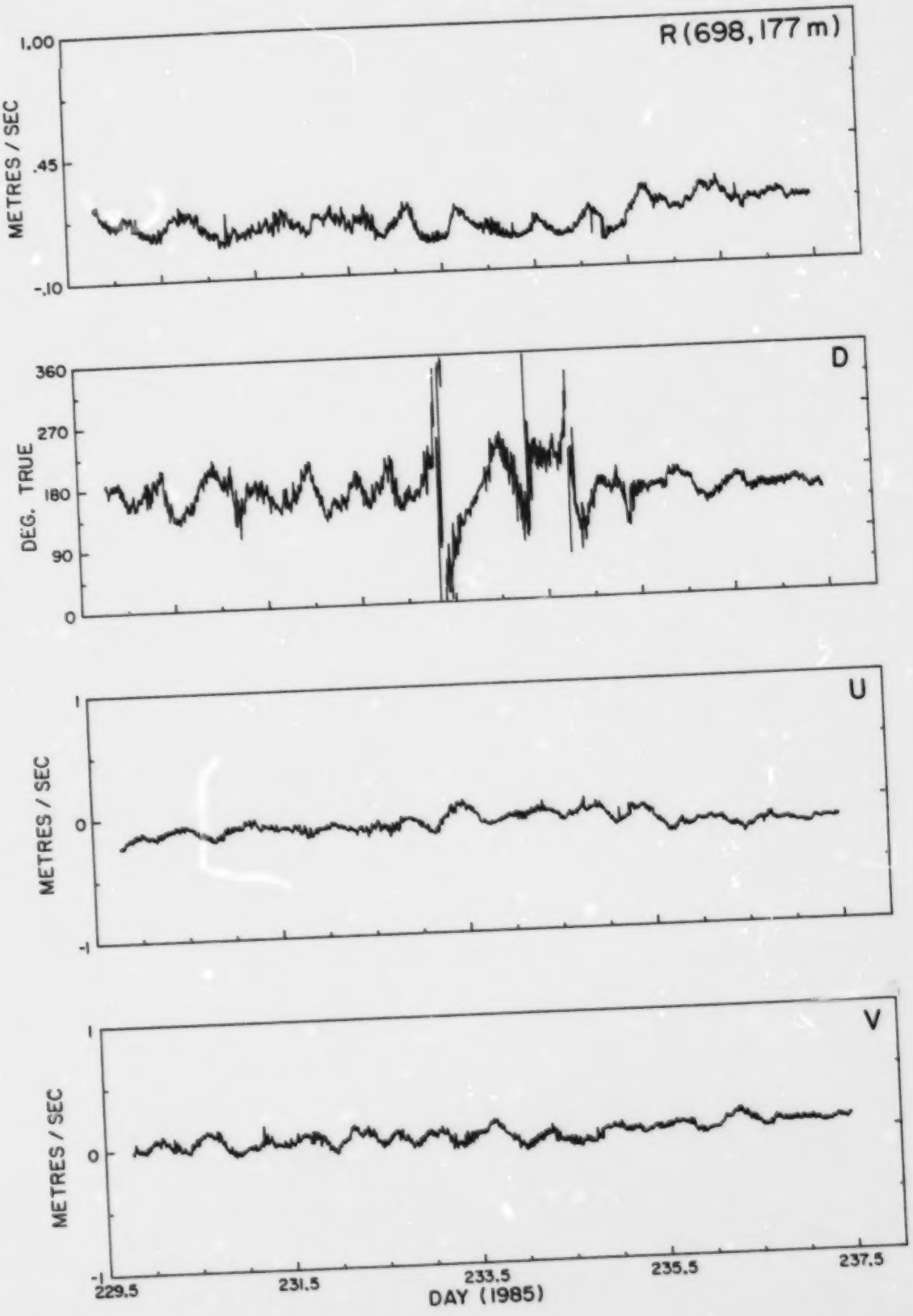
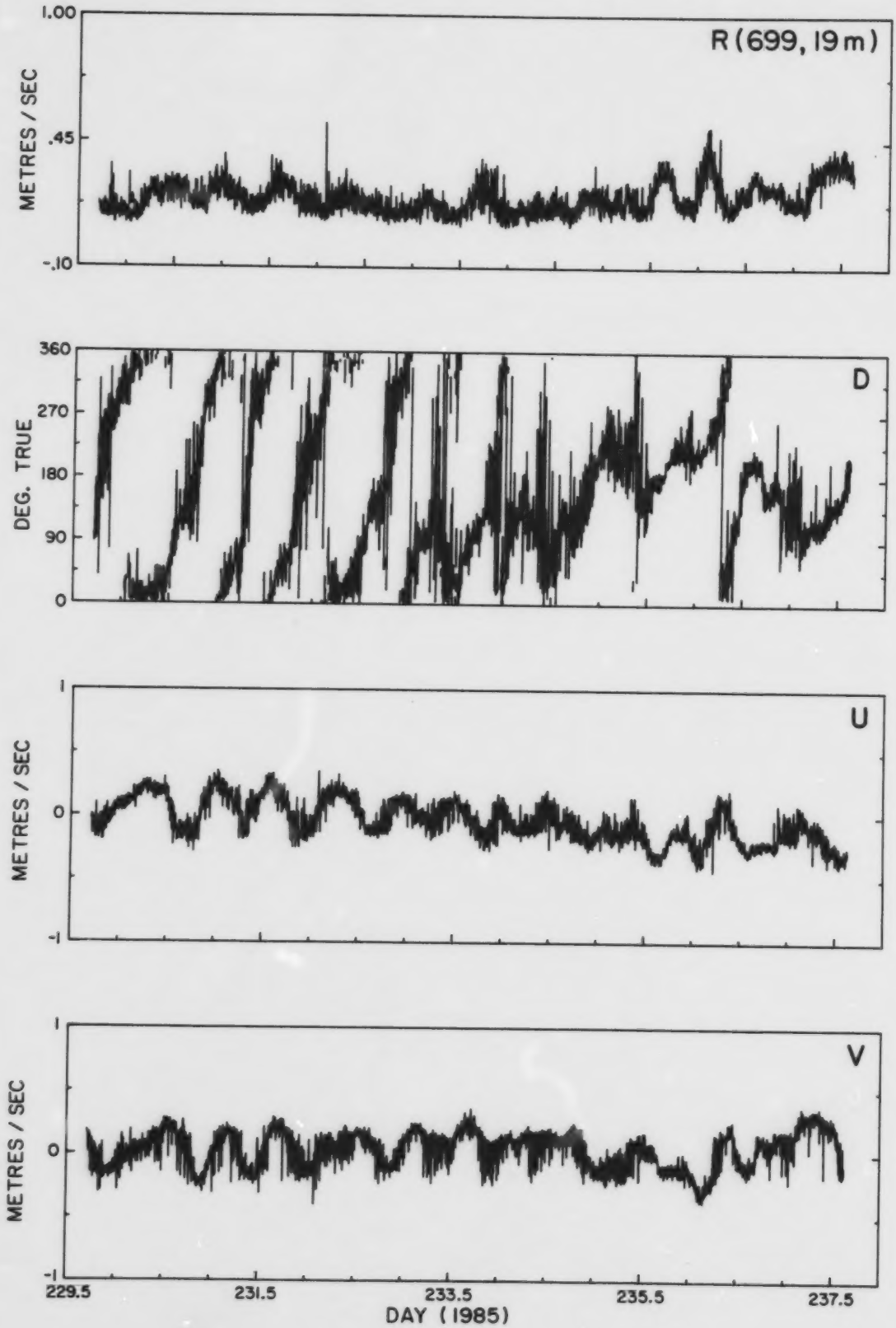

R(698,177 m)
1.00
.45
-.10
METRES / SEC
D
360
270
180
90
0
DEG. TRUE
U
1
0
-1
METRES / SEC
V
1
0
-1
METRES / SEC
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig. 11


R(699, 19m)
METRES / SEC
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.45
-.10
D
DEG. TRUE
360
270
180
90
0
U
METRES / SEC
1
0
-1
V
METRES / SEC
1
0
-1
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig 12

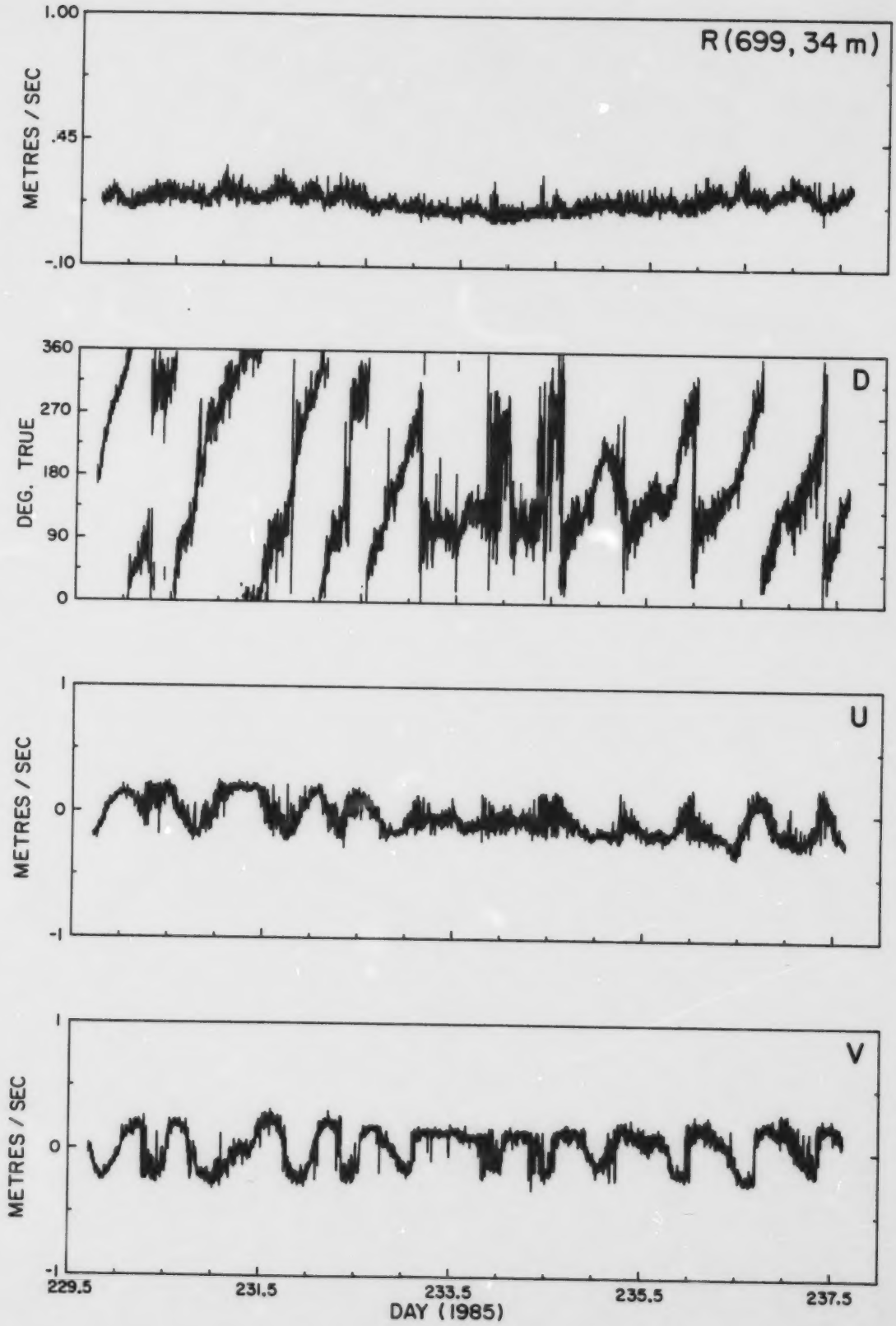
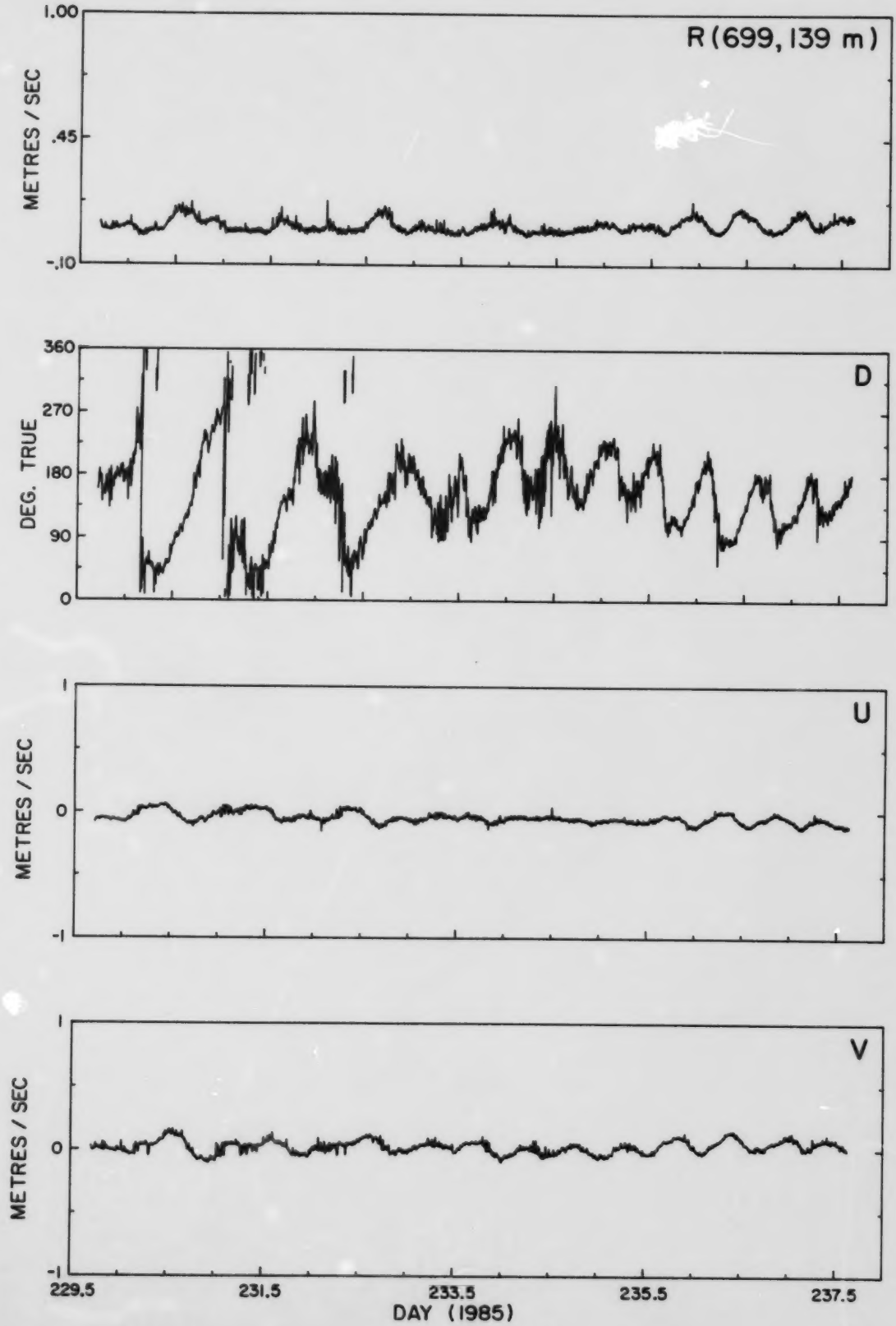

R(699, 34 m)
METRES / SEC
1.00
.45
-.10
D
DEG. TRUE
360
270
180
90
0
U
METRES / SEC
1
0
-1
V
METRES / SEC
1
0
-1
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig. 13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-.10
D
DEG. TRUE
360
270
180
90
0
U
METRES / SEC
1
0
-1
V
METRES / SEC
1
0
-1
229.5
231.5
233.5
235.5
237.5
DAY (1985)

Fig 14

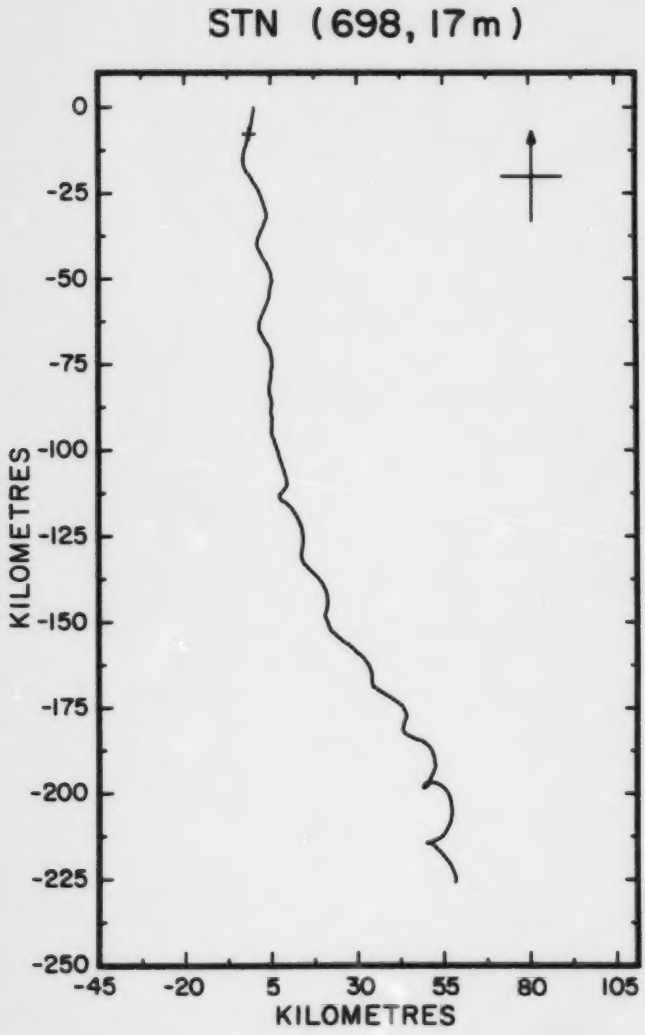

STN (698, 17m)
0
-25
-50
-75
-100
-125
-150
-175
-200
-225
-250
KILOMETRES
-45
-20
5
30
55
80
105
KILOMETRES

Fig. 15

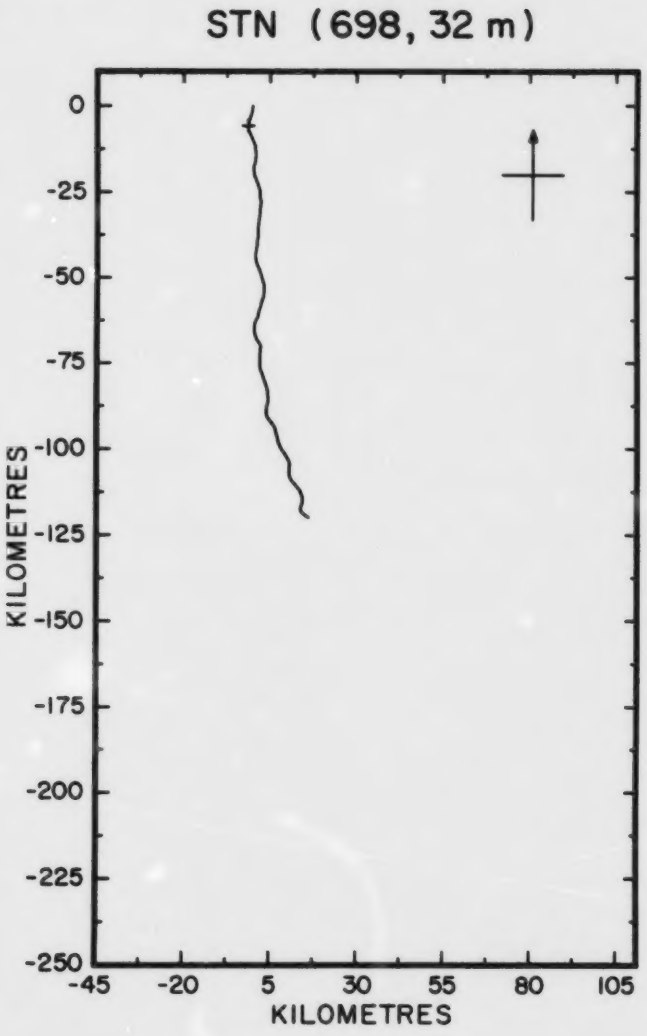

STN (698, 32 m)
0
-25
-50
-75
-100
-125
-150
-175
-200
-225
-250
KILOMETRES
-45
-20
5
30
55
80
105
KILOMETRES

Fig. 16

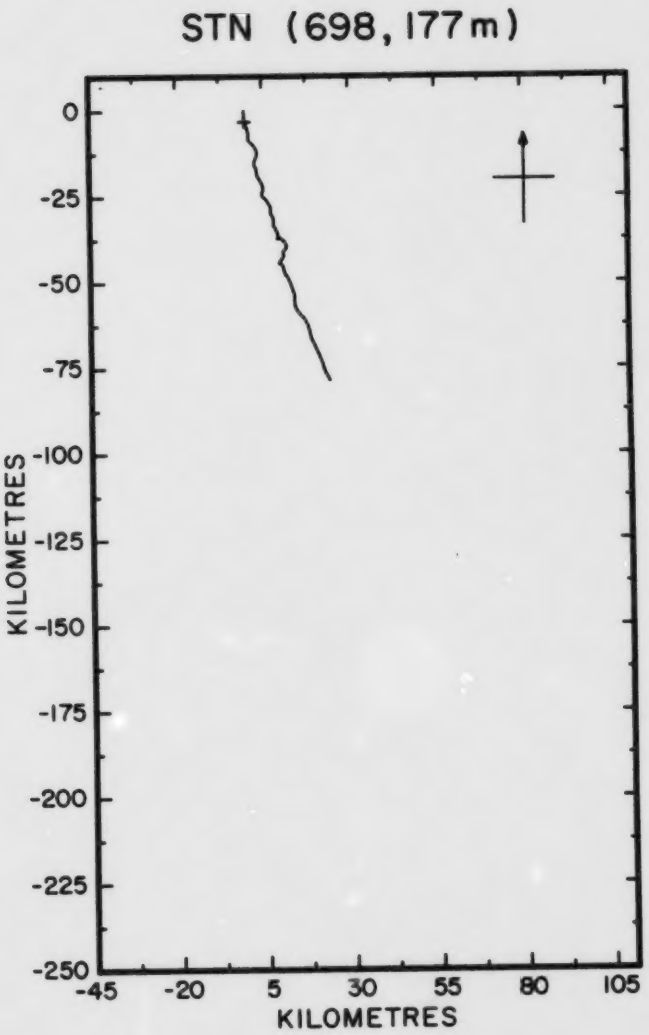

STN (698, 177m)
0
-25
-50
-75
-100
-125
-150
-175
-200
-225
-250
KILOMETRES
-45
-20
5
30
55
80
105
KILOMETRES

Fig. 17

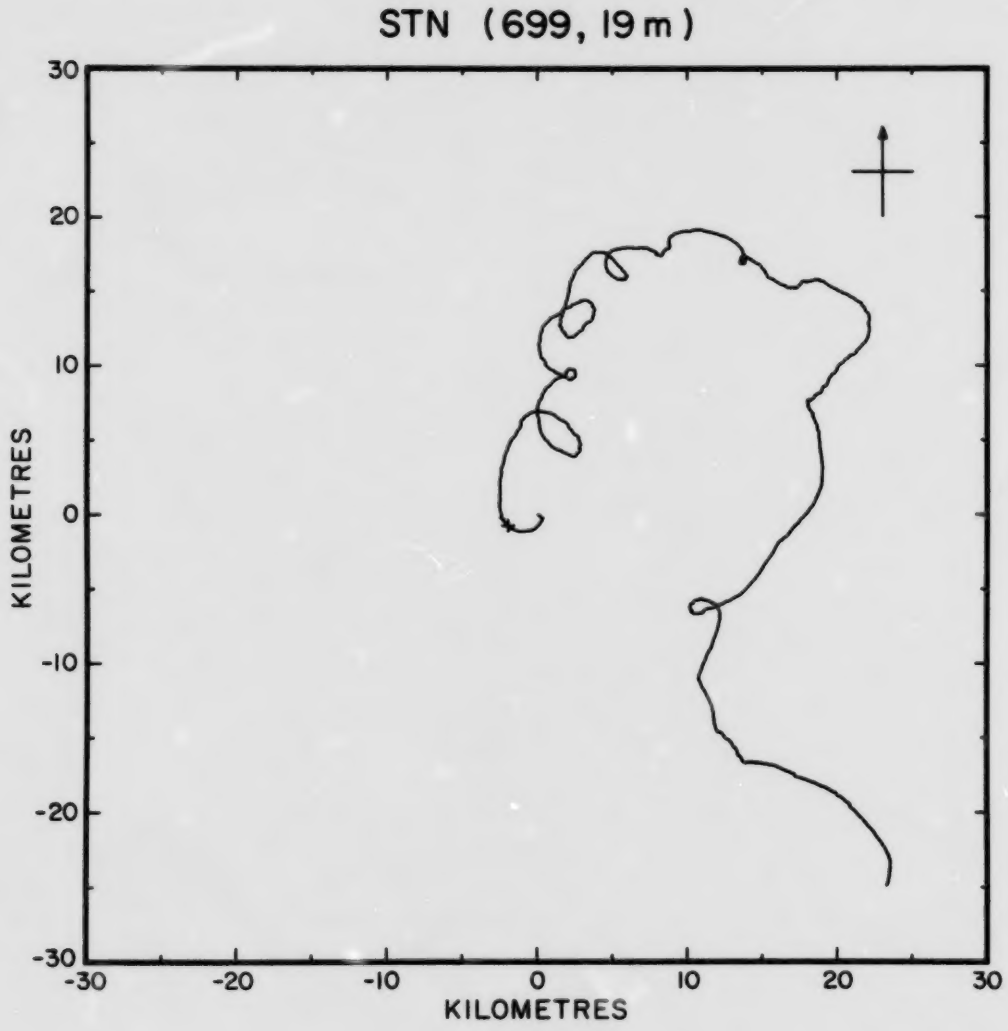

STN (699, 19 m)
30
20
10
0
-10
-20
-30
KILOMETRES
-30
-20
-10
0
10
20
30
KILOMETRES

Fig. 18

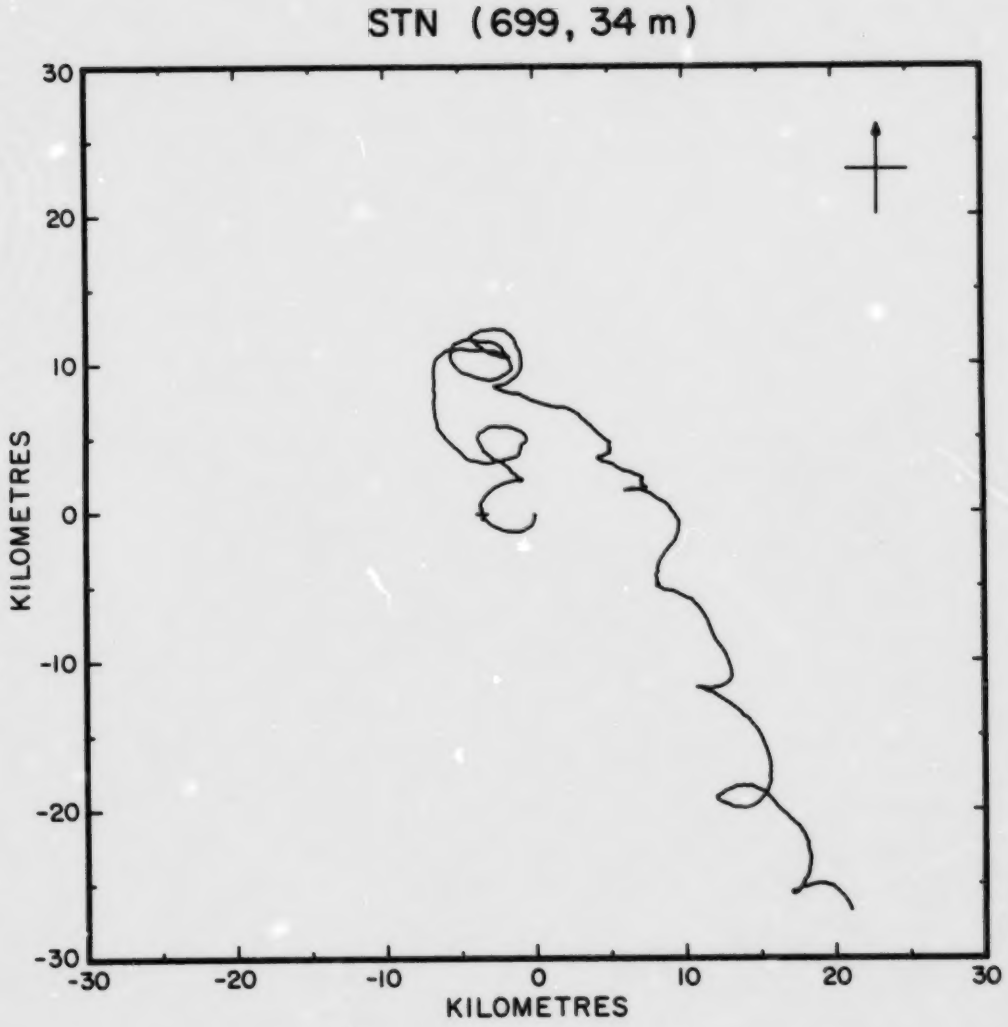

STN (699, 34 m)
30
20
10
0
-10
-20
-30
KILOMETRES
-30
-20
-10
0
10
20
30
KILOMETRES

Fig. 19

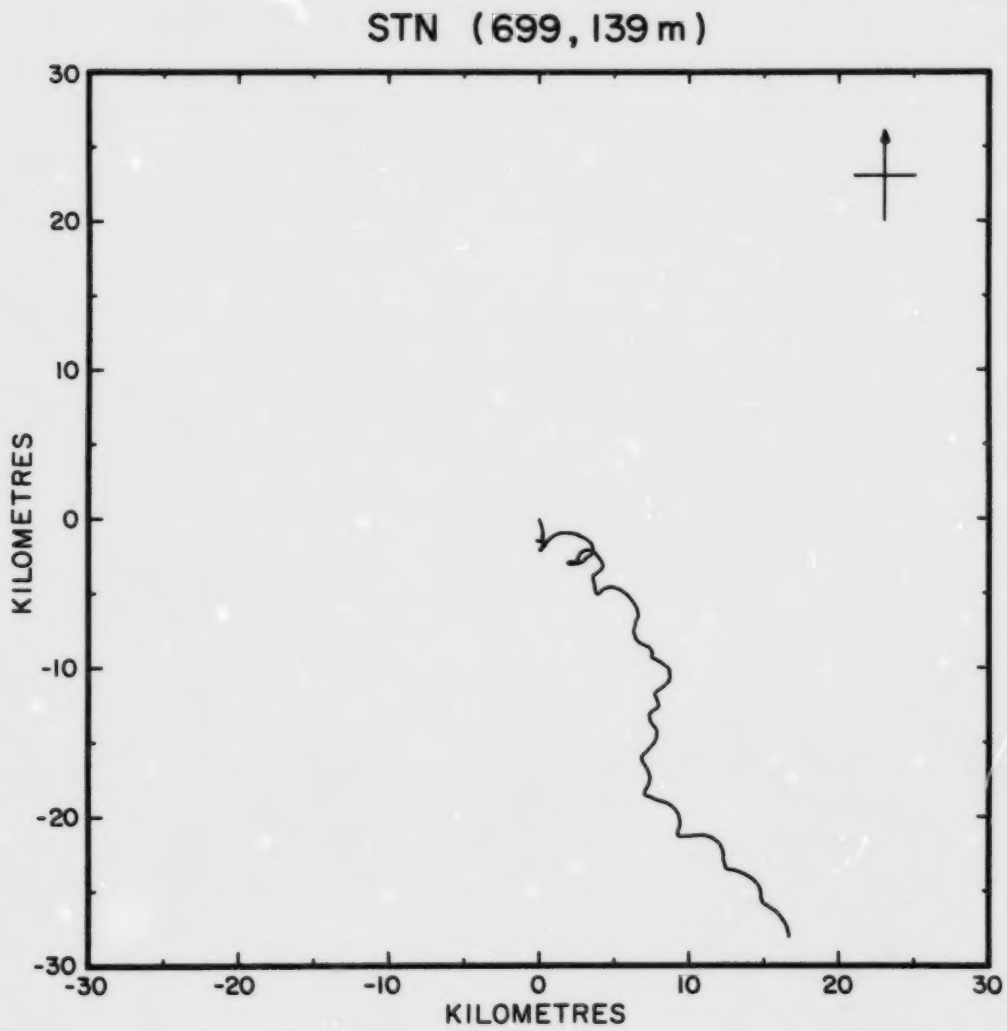

STN (699, 139 m)
30
20
10
0
-10
-20
-30
KILOMETRES
-30
-20
-10
0
10
20
30
KILOMETRES

Fig. 20

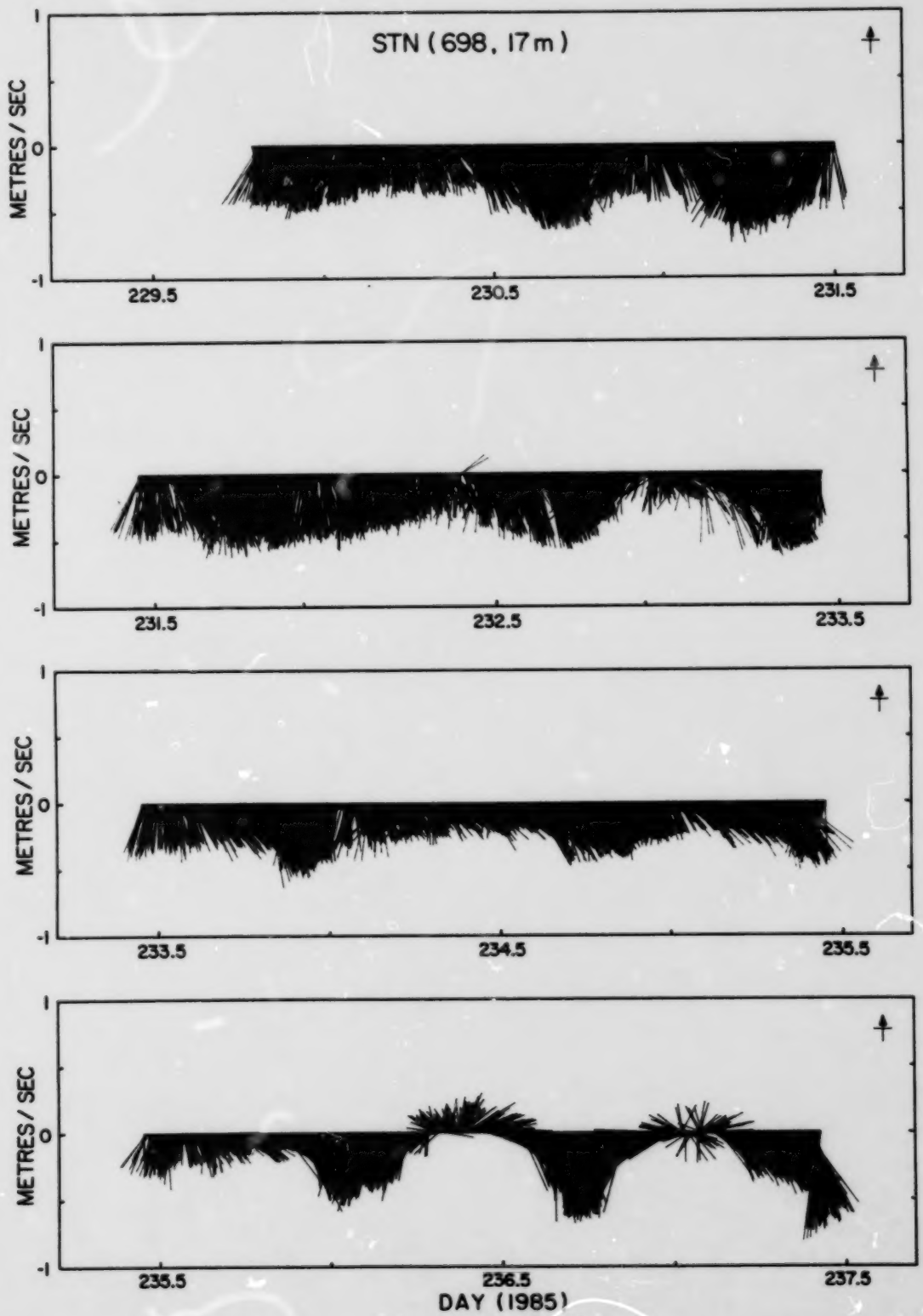

STN (698, 17m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
METRES / SEC
1
0
-1
231.5
232.5
233.5
METRES / SEC
1
0
-1
233.5
234.5
235.5
METRES / SEC
1
0
-1
235.5
236.5
237.5
DAY (1985)

Fig. 21

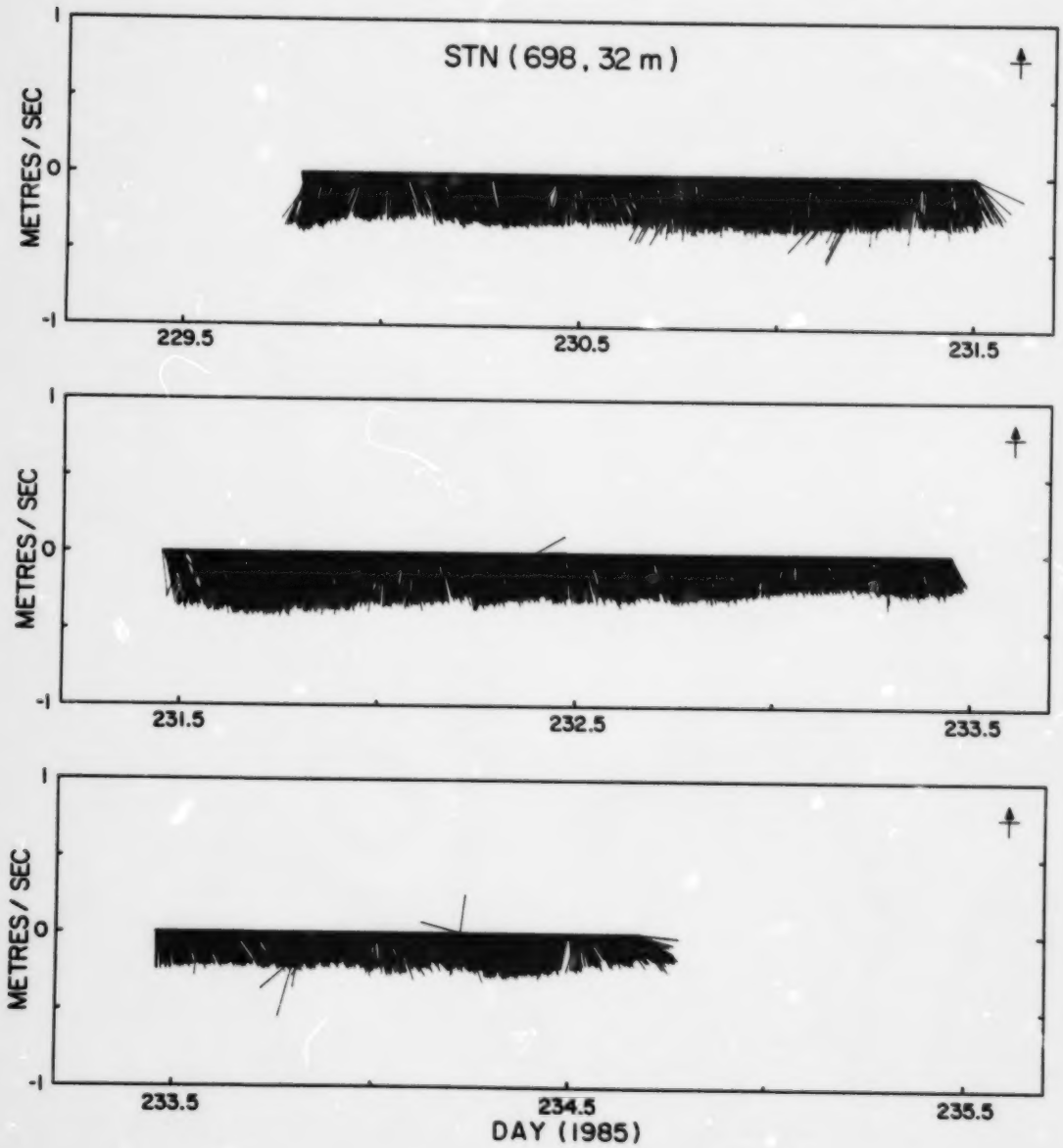

STN (698, 32 m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
METRES / SEC
1
0
-1
231.5
232.5
233.5
METRES / SEC
1
0
-1
233.5
234.5
235.5
DAY (1985)

Fig 22

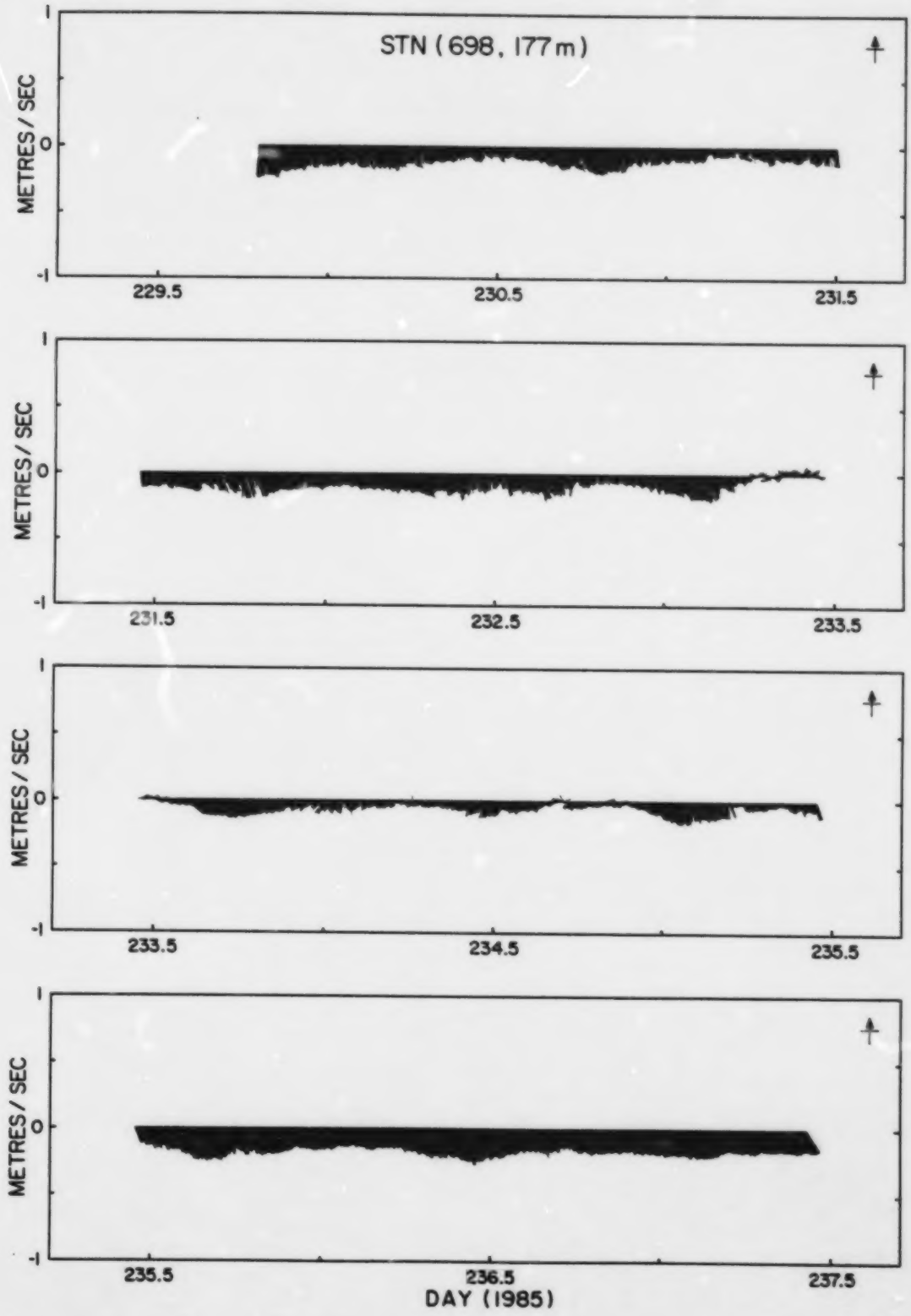

STN (698, 177m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
231.5
232.5
233.5
233.5
234.5
235.5
235.5
236.5
237.5
DAY (1985)

Fig. 23

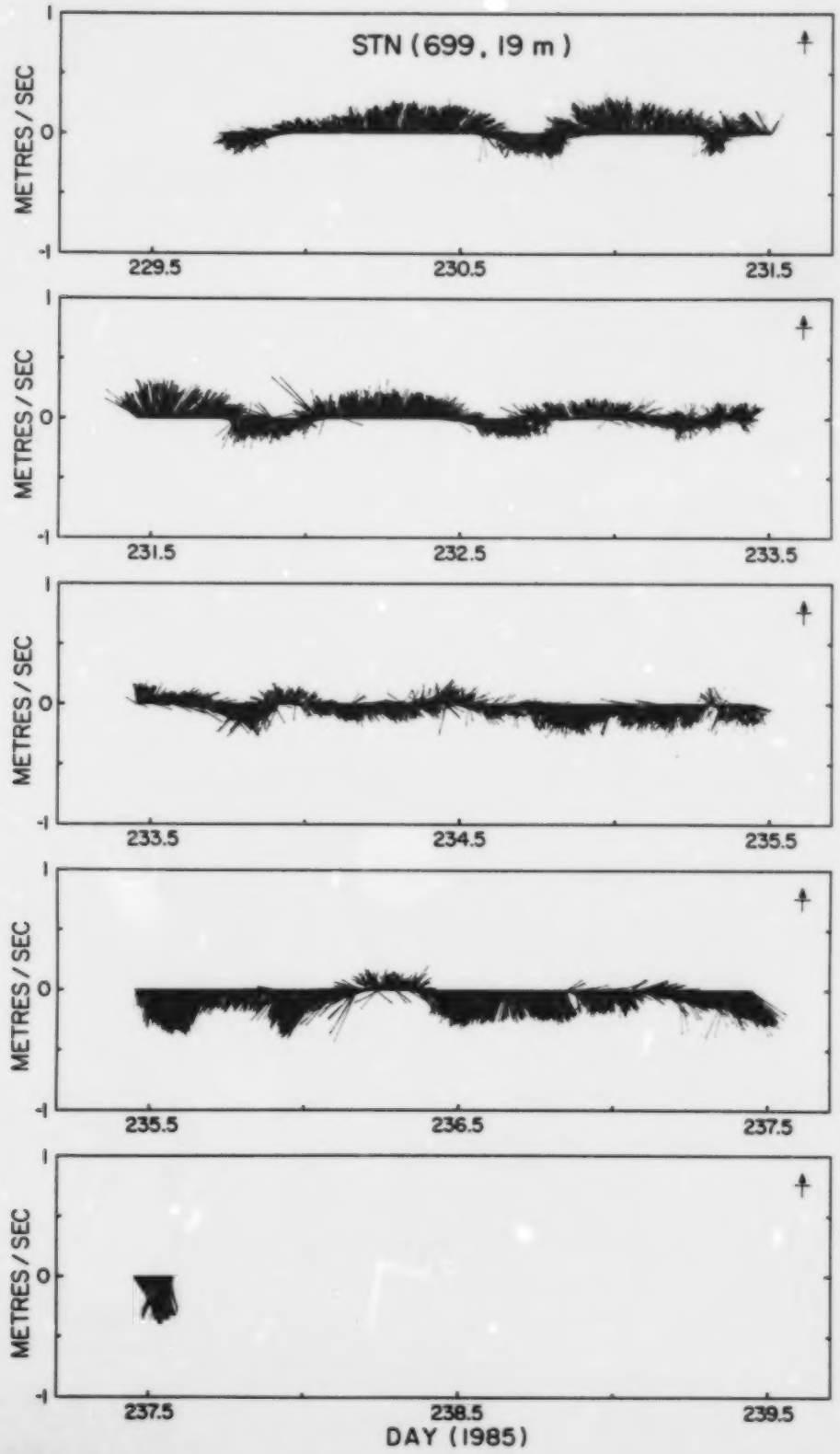

STN (699, 19 m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
231.5
232.5
233.5
233.5
234.5
235.5
235.5
236.5
237.5
237.5
238.5
239.5
DAY (1985)

Fig 24

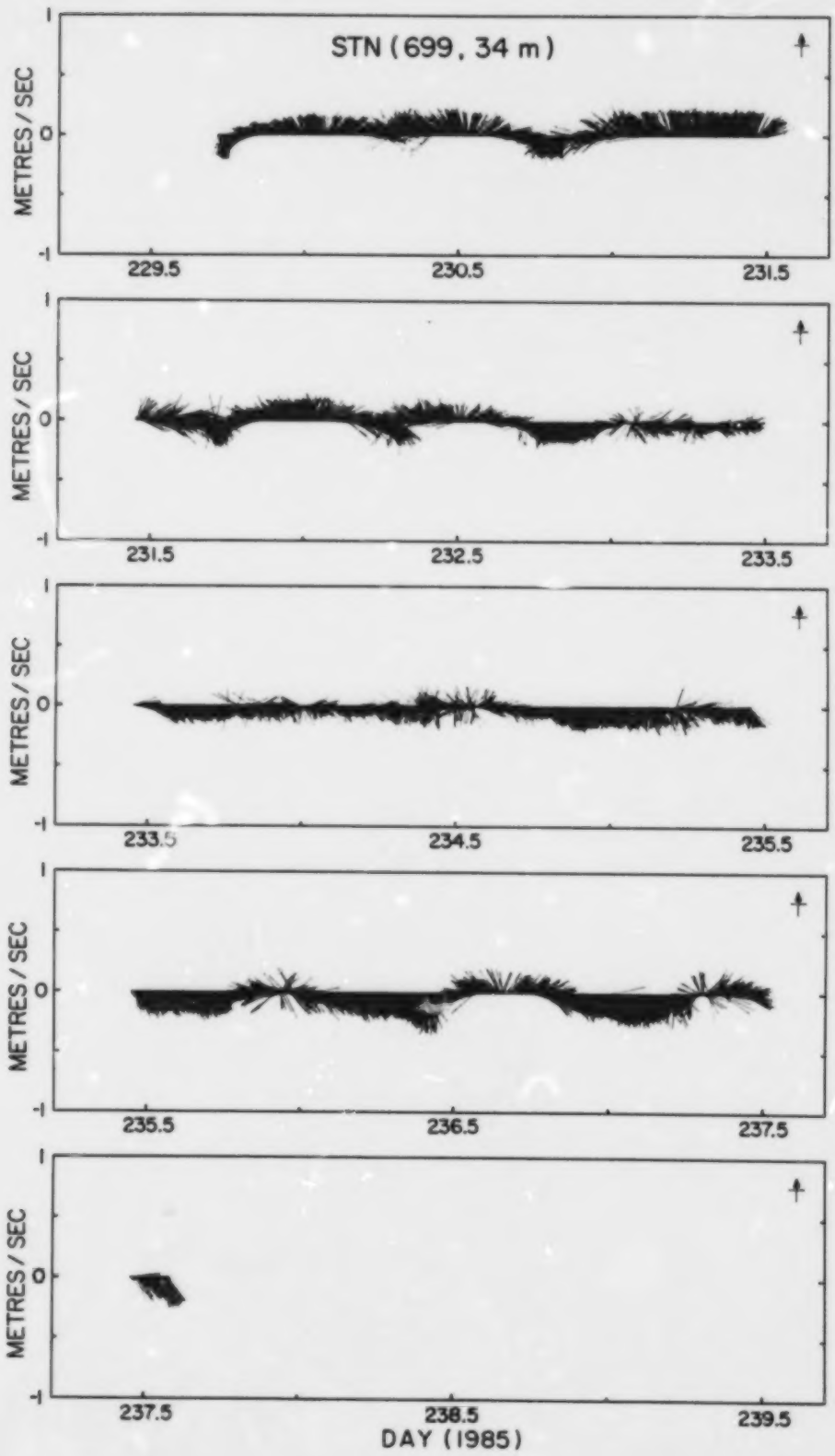

STN (699, 34 m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
231.5
232.5
233.5
233.5
234.5
235.5
235.5
236.5
237.5
237.5
238.5
239.5
DAY (1985)

Fig. 25

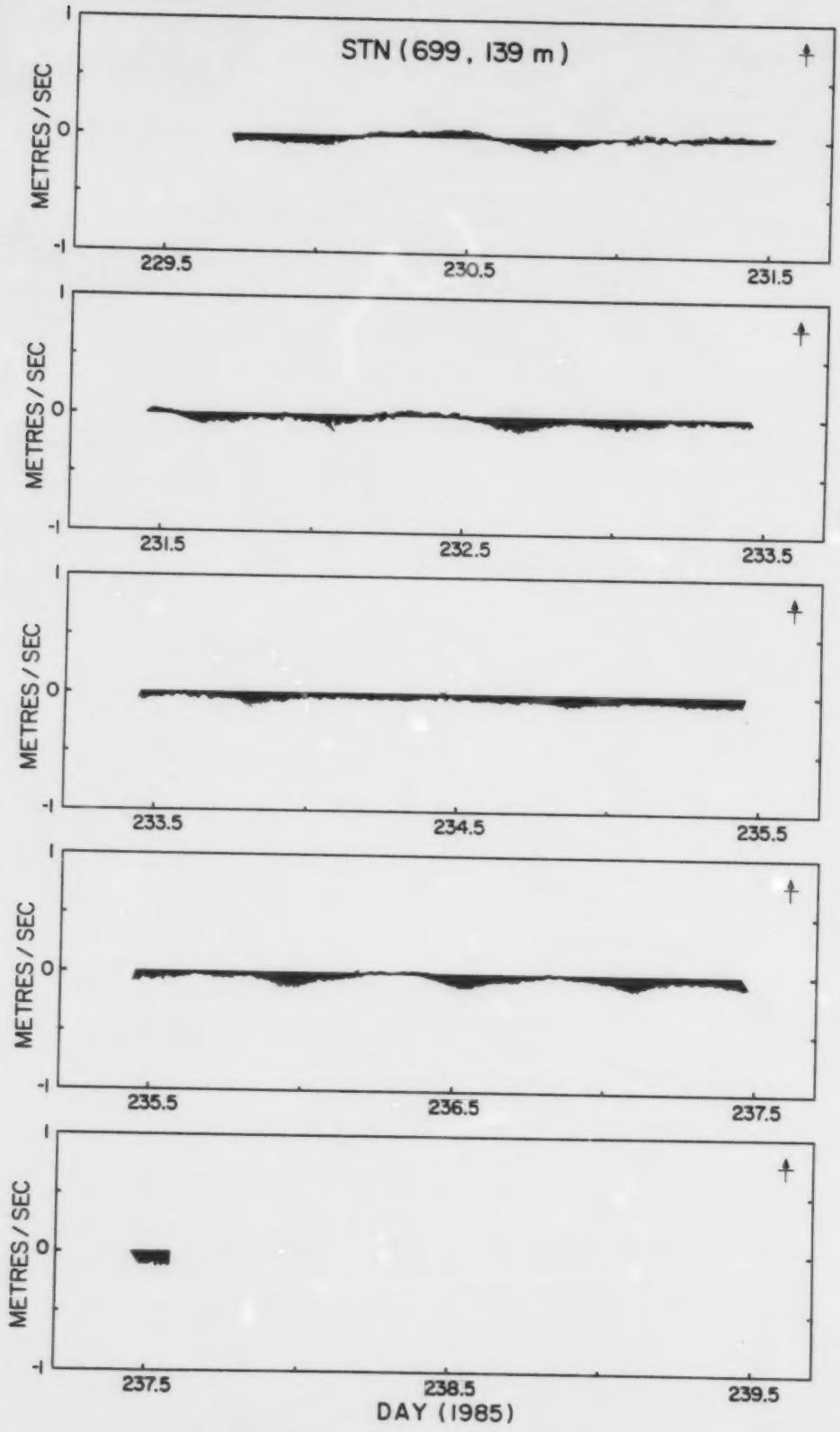

STN (699, 139 m)
METRES / SEC
1
0
-1
229.5
230.5
231.5
231.5
232.5
233.5
233.5
234.5
235.5
235.5
236.5
237.5
237.5
238.5
239.5
DAY (1985)

Fig. 26

Figures 27-44

BATFISH station 45; 9 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, (Acoustic Doppler Current Profiler), location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. The relative spacing of the U and V profiles reflects their relative position in the section. The null line of the first U and V profile is aligned vertically with the origin of the Sigma-t section.

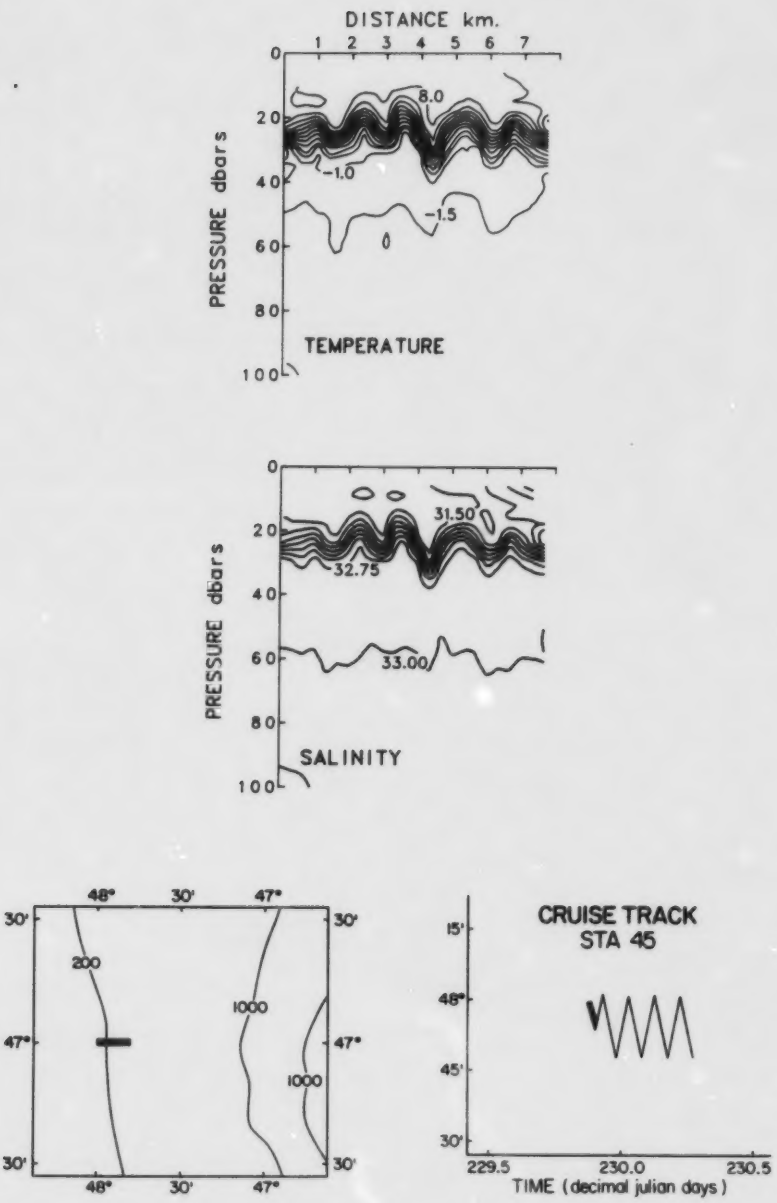

DISTANCE km.
1 2 3 4 5 6 7
0
20
40
60
80
100
PRESSURE dbars
8.0
-1.0
-1.5
0
TEMPERATURE
31.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
48°
45'
30'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 27

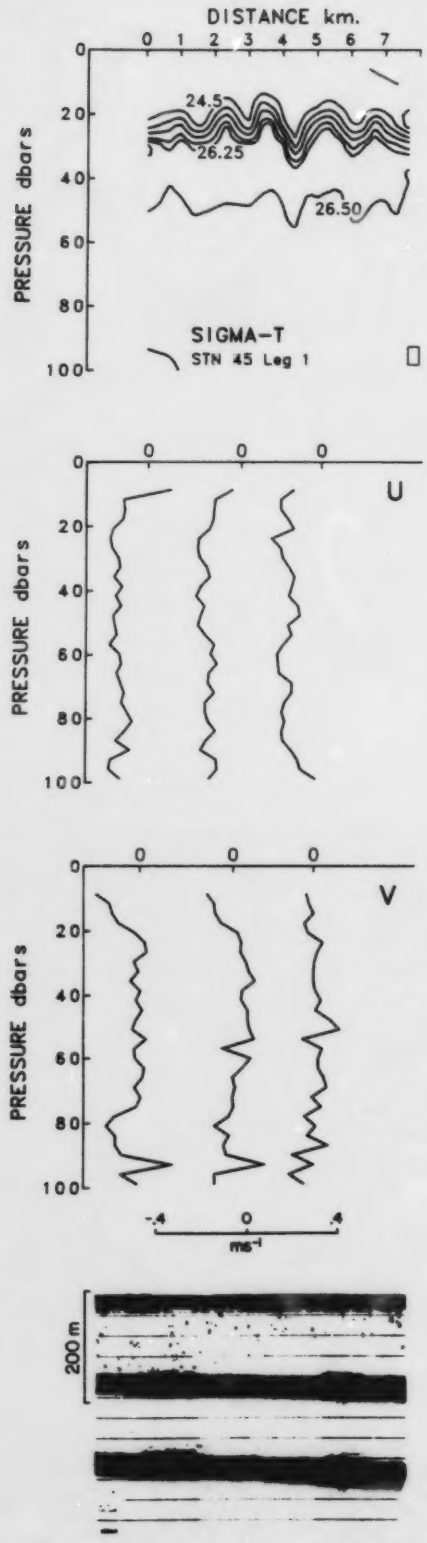
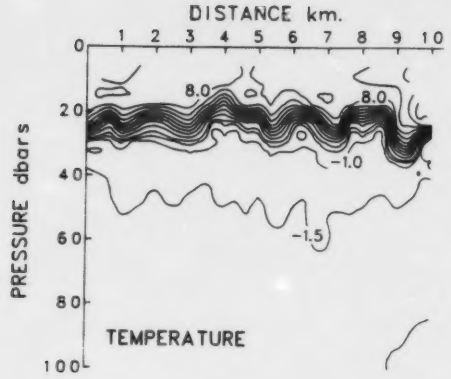
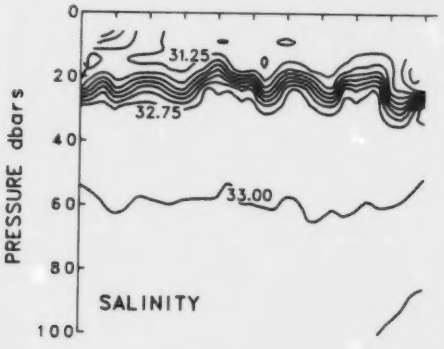
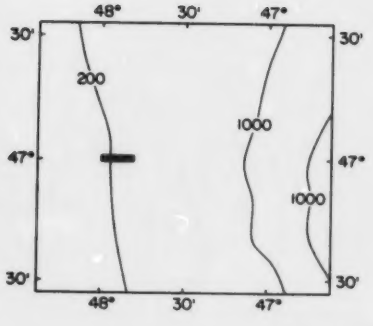

DISTANCE km.
0 1 2 3 4 5 6 7
PRESSURE dbars
0
20
40
60
80
100
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 1
U
V
-.4
0
.4
ms⁻¹
200 m

Fig. 28


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10
PRESSURE dbars
0
20
40
60
80
100
8.0
8.0
-1.0
-1.5
TEMPERATURE


PRESSURE dbars
0
20
40
60
80
100
31.25
32.75
33.00
SALINITY


48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°

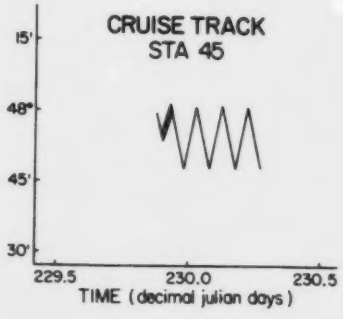

CRUISE TRACK
STA 45
15'
48°
45'
30'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 29

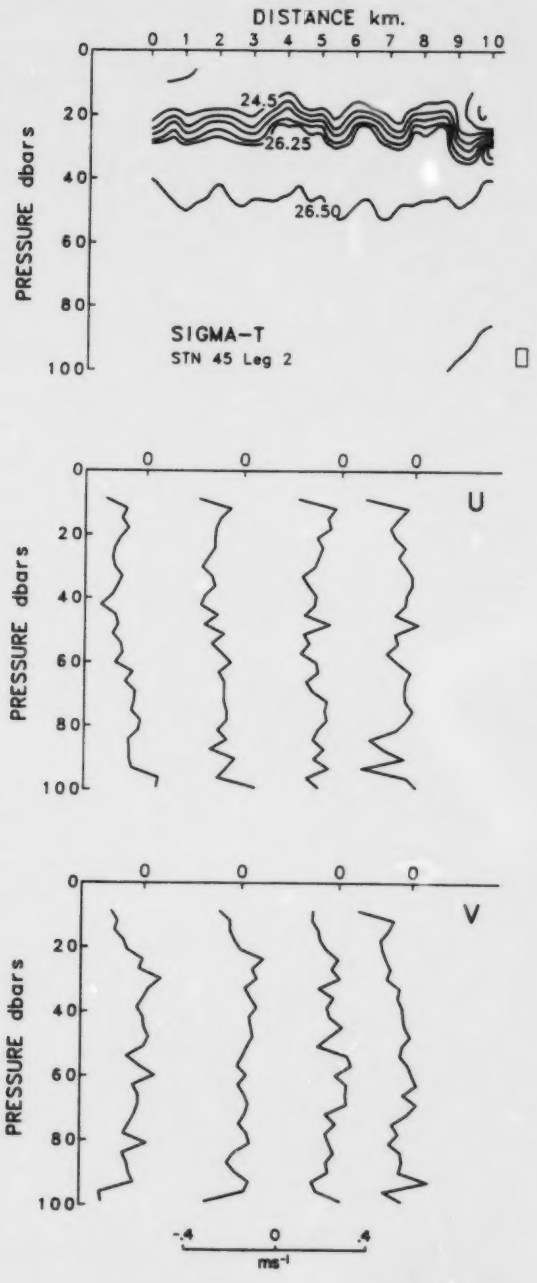

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10
PRESSURE dbars
0
20
40
60
80
100
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 2
U
V
0 0 0 0
-.4 0 .4
ms⁻¹

Fig. 30

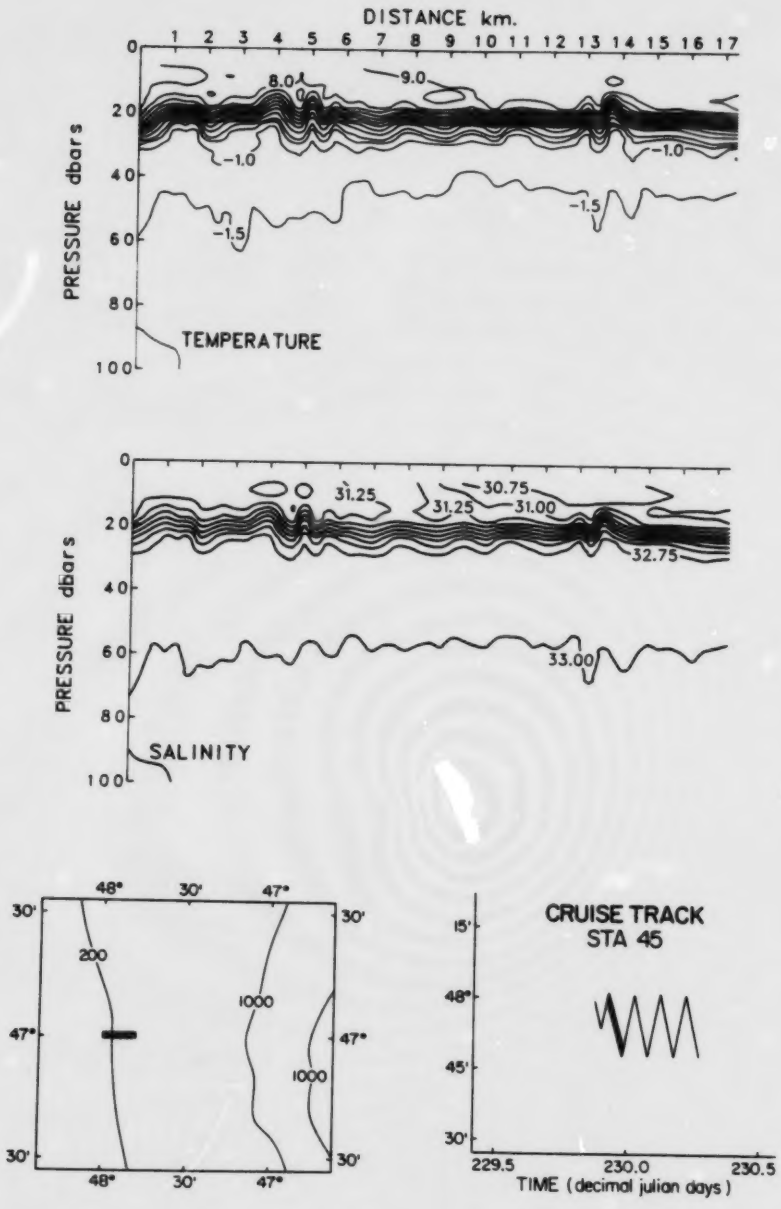

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
8.0
9.0
-1.0
-1.0
-1.5
-1.5
TEMPERATURE
31.25
30.75
31.25
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 31

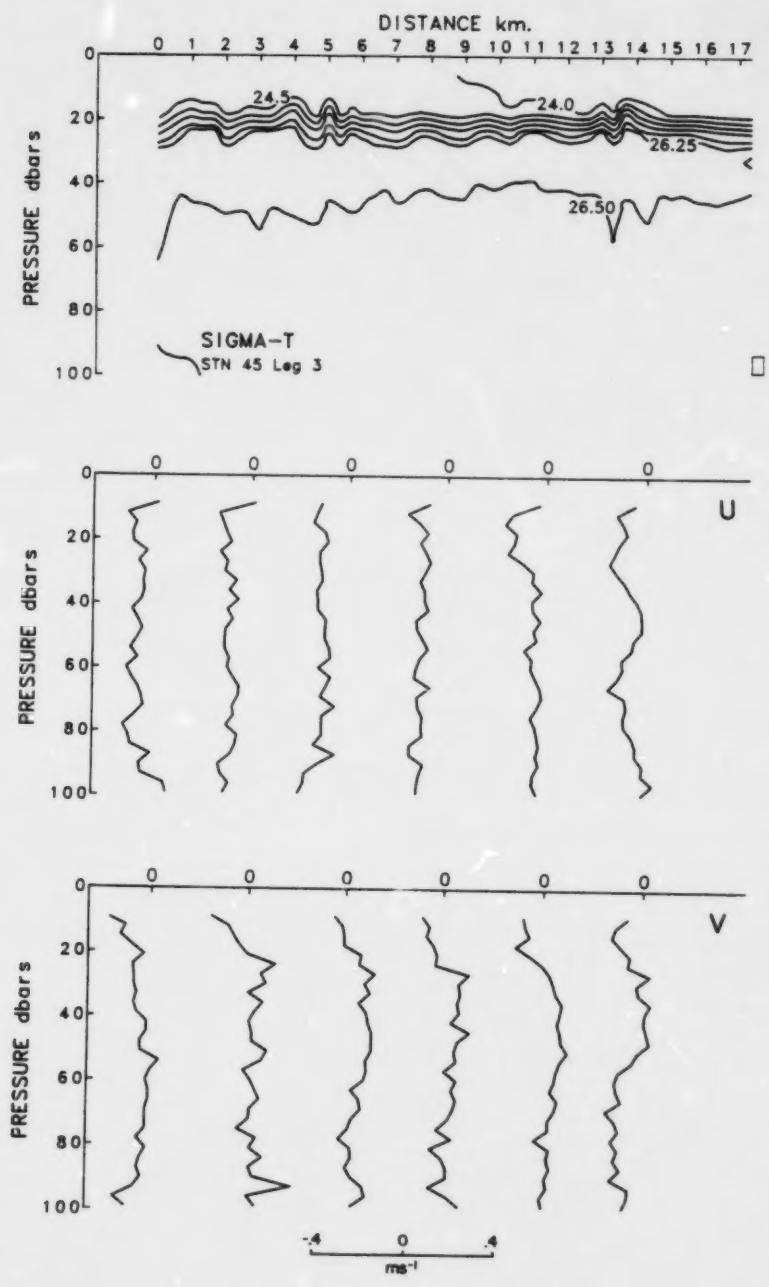

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.5
24.0
26.25
26.50
SIGMA-T
STN 45 Leg 3
U
V
0 0 0 0 0 0
-.4 0 .4
ms⁻¹

Fig 32

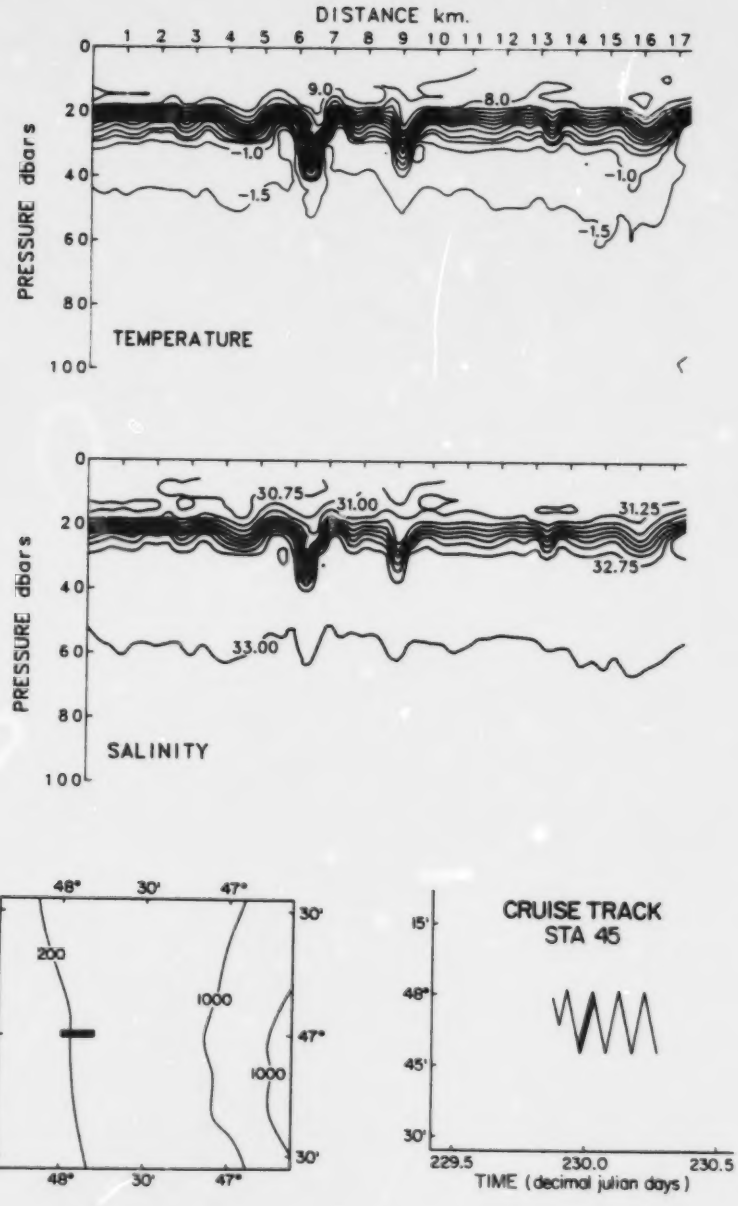

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
9.0
8.0
-1.0
-1.5
-1.0
-1.5
TEMPERATURE
30.75
31.00
31.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
45'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 33

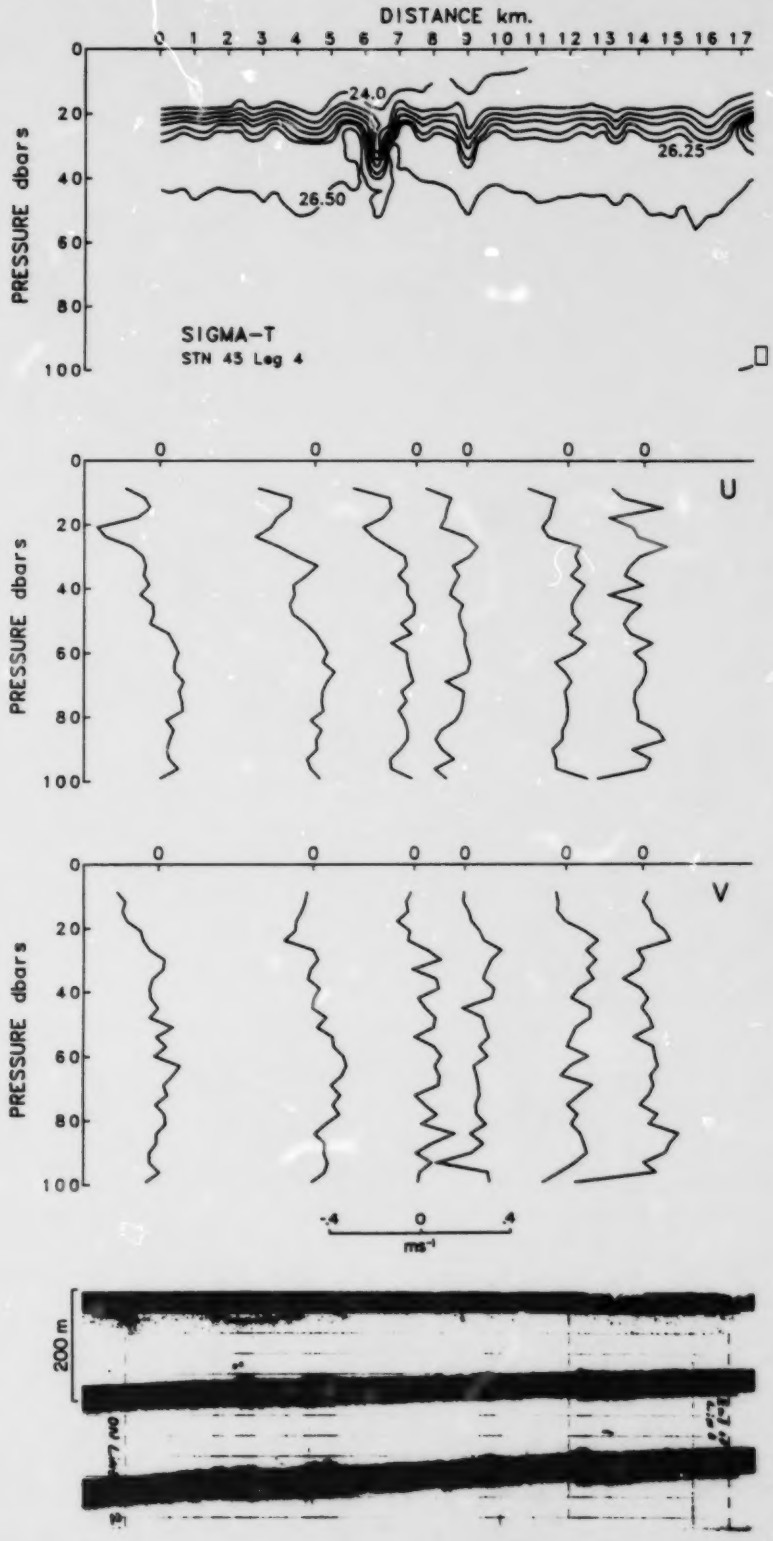

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 45 Leg 4
U
V
0 0 0 0 0 0
-.4 0 .4
ms⁻¹
200 m

Fig 34

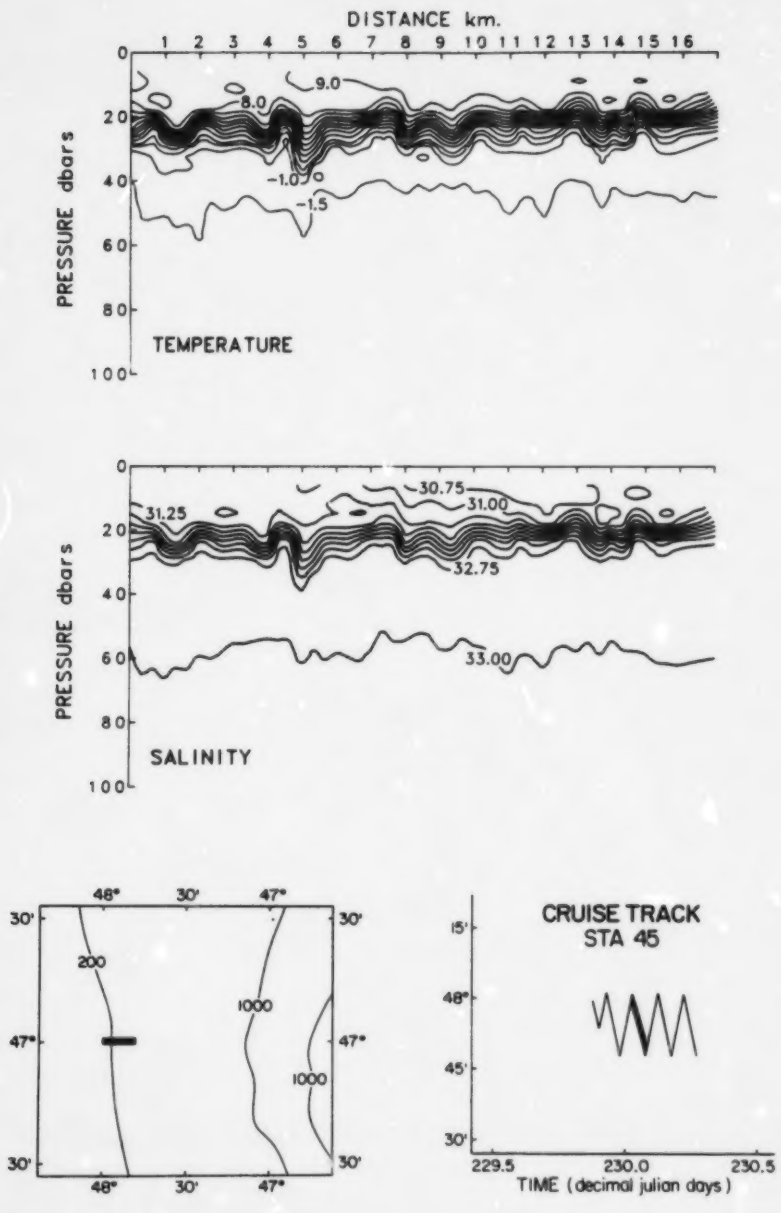

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
9.0
8.0
-1.0
-1.5
TEMPERATURE
30.75
31.00
31.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
45'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 35

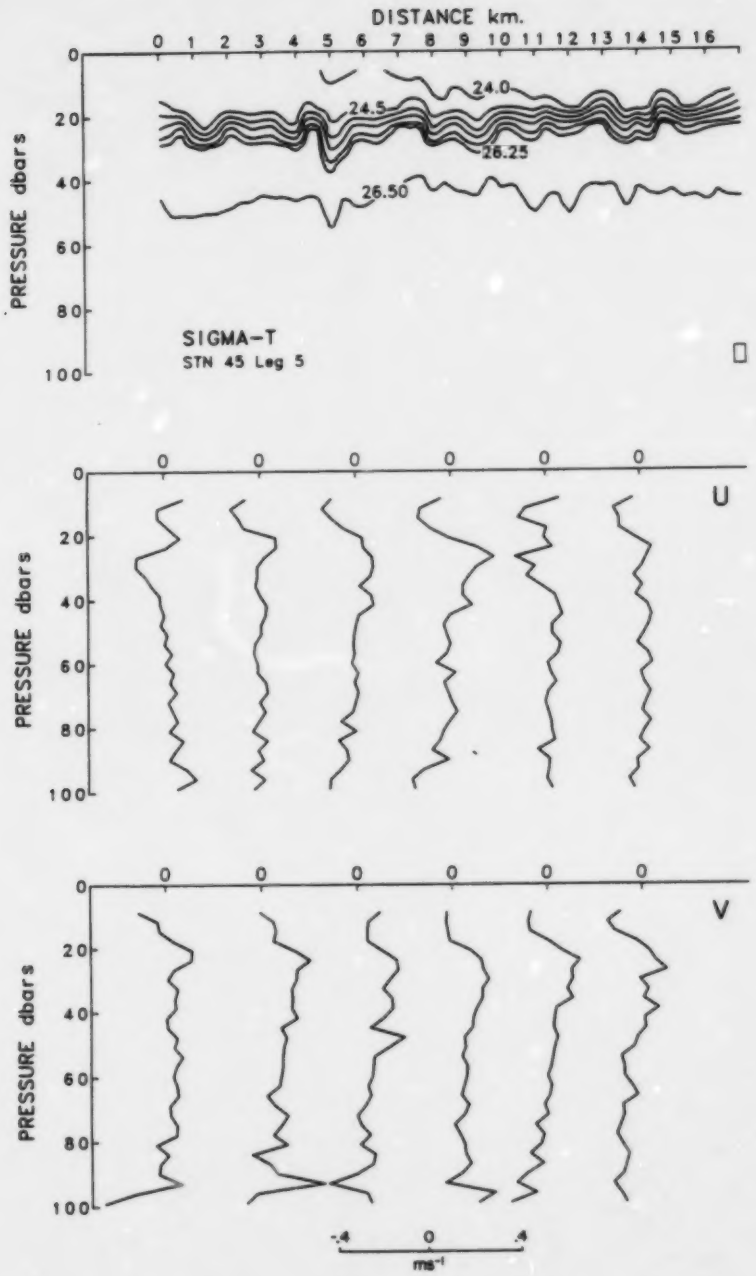

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 5
U
V
-.4
0
.4
ms⁻¹

Fig. 36

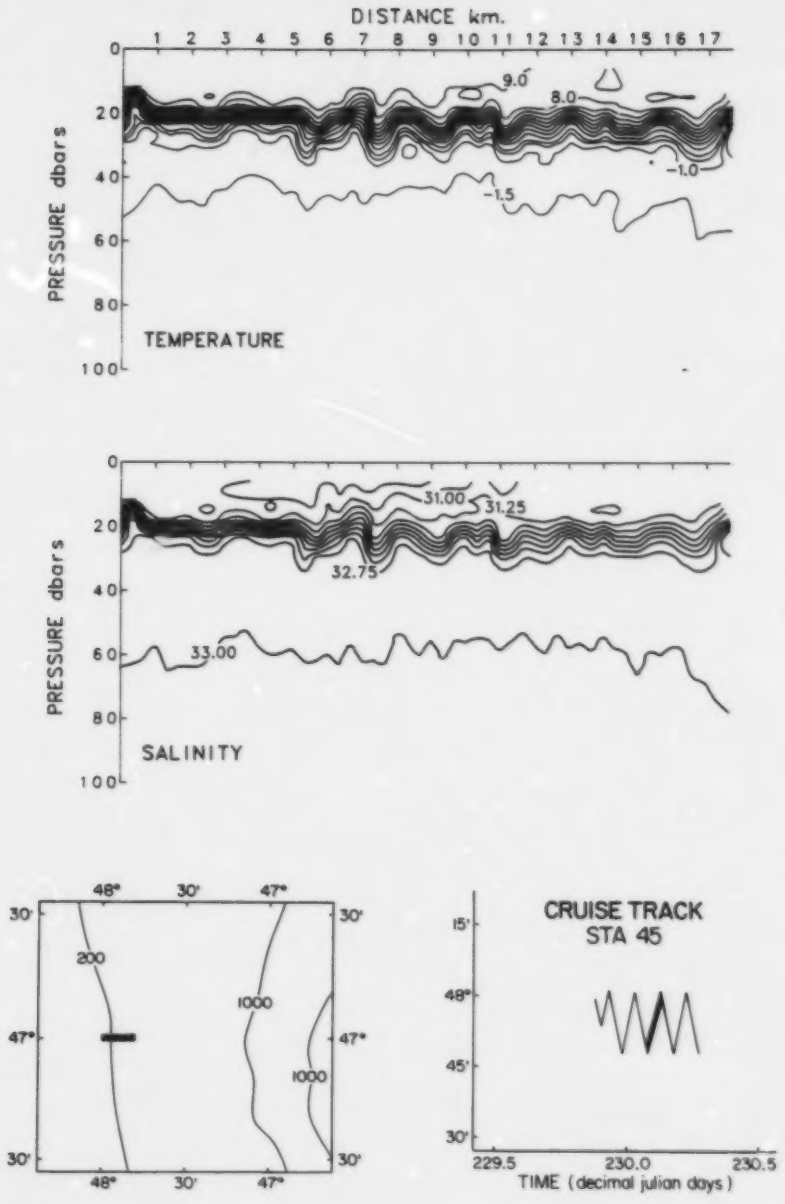

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
45'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 37

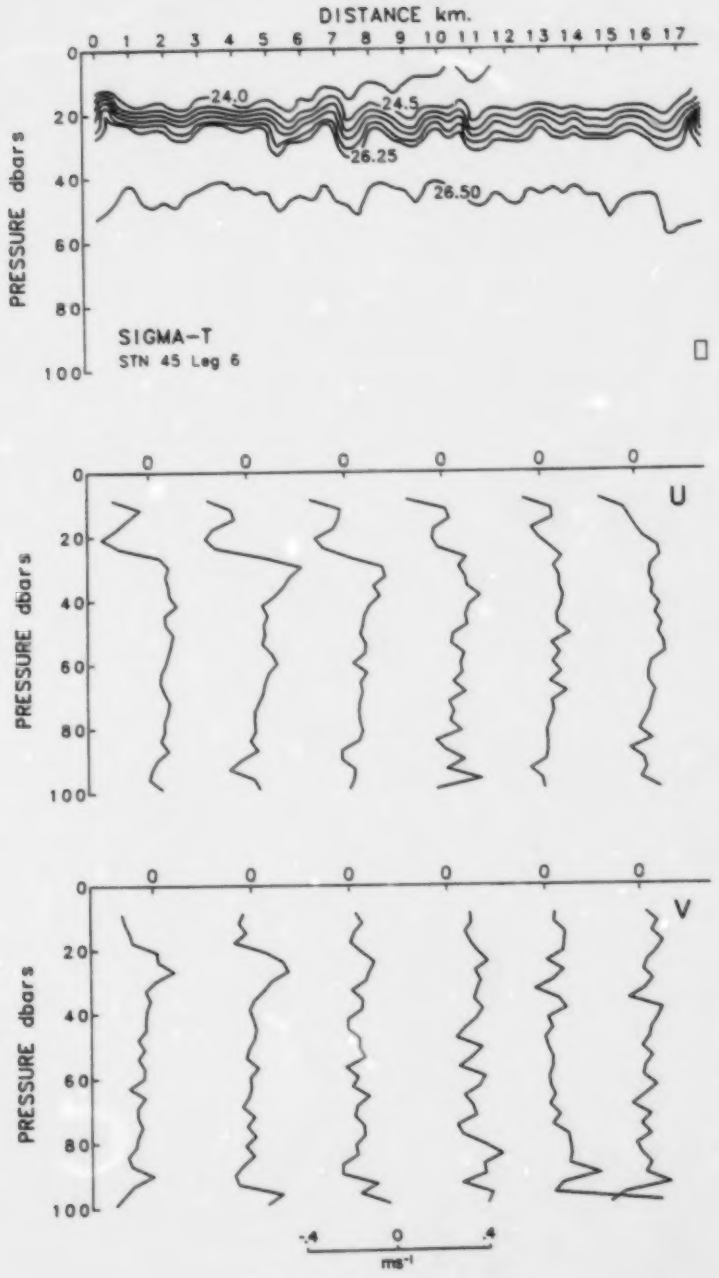

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 6
U
V
0 0 0 0 0 0
-.4 0 .4
ms-1

Fig. 38

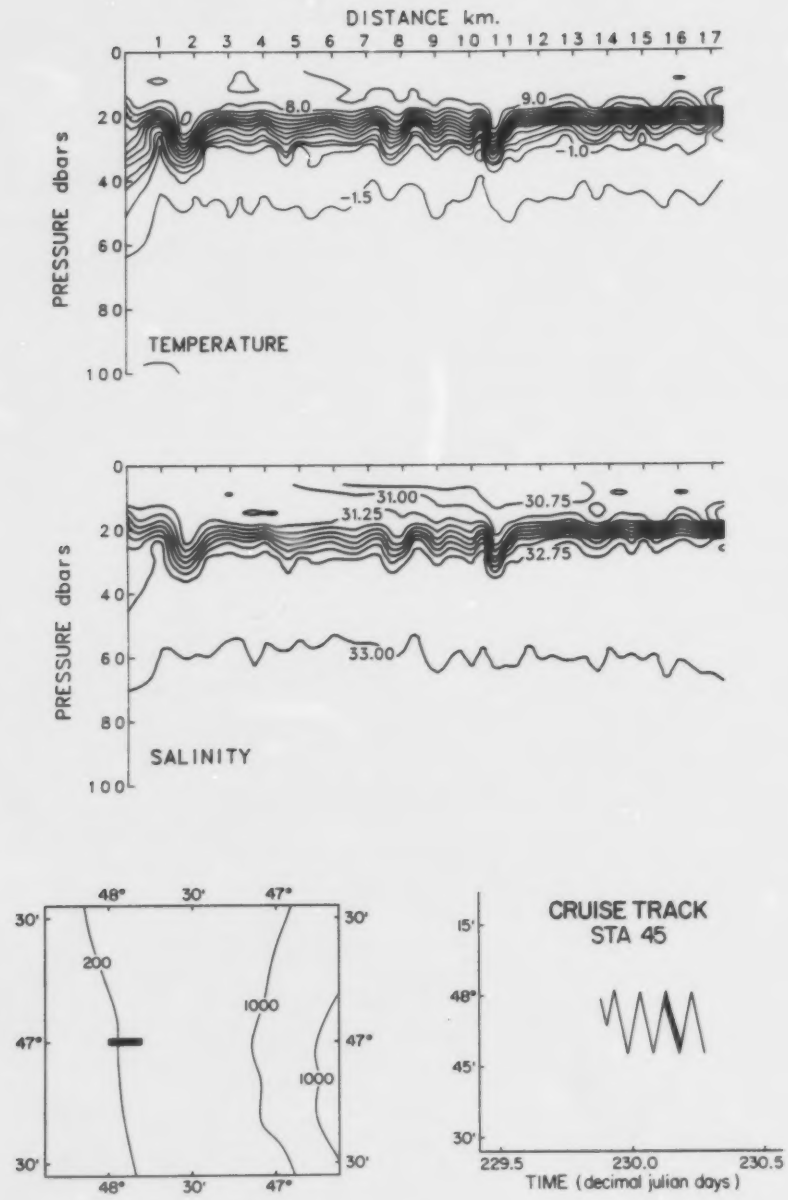

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
8.0
9.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
30.75
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
48°
45'
30'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 39

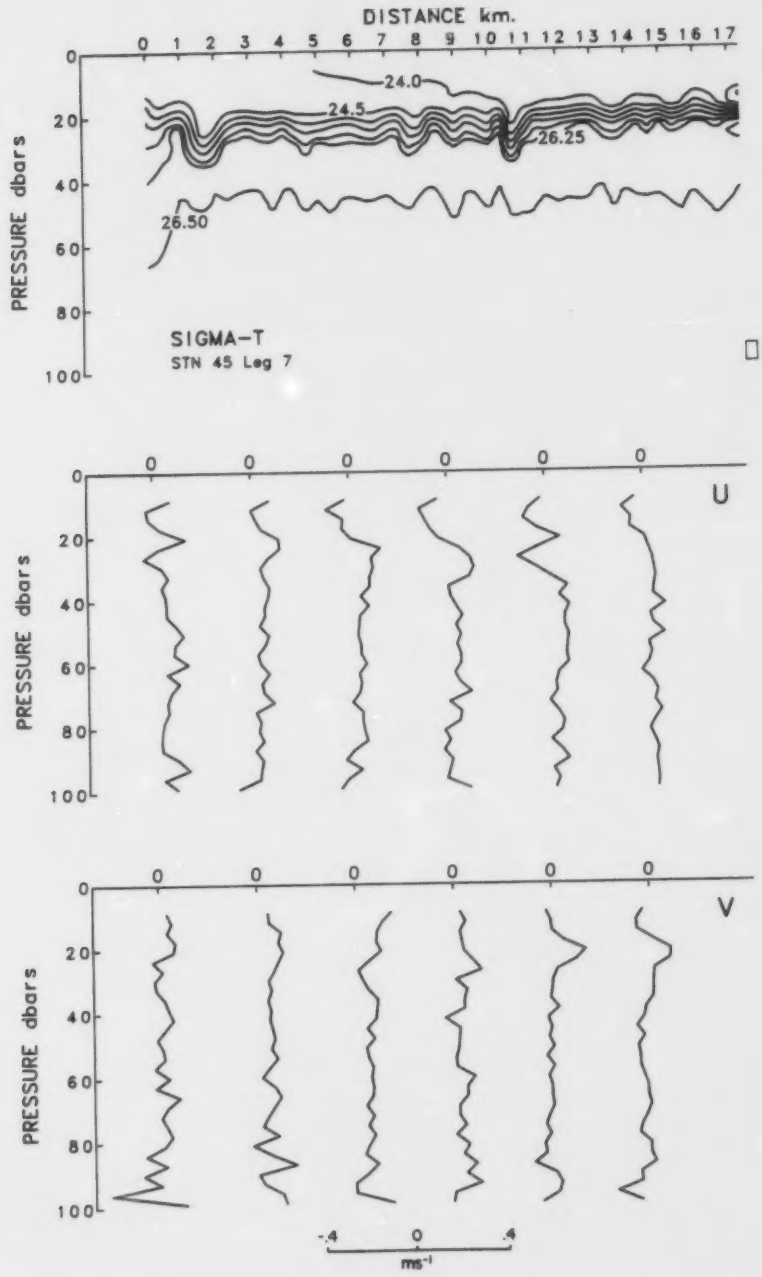

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 7
U
V
0 0 0 0 0 0
-.4 0 .4
ms⁻¹

Fig. 40

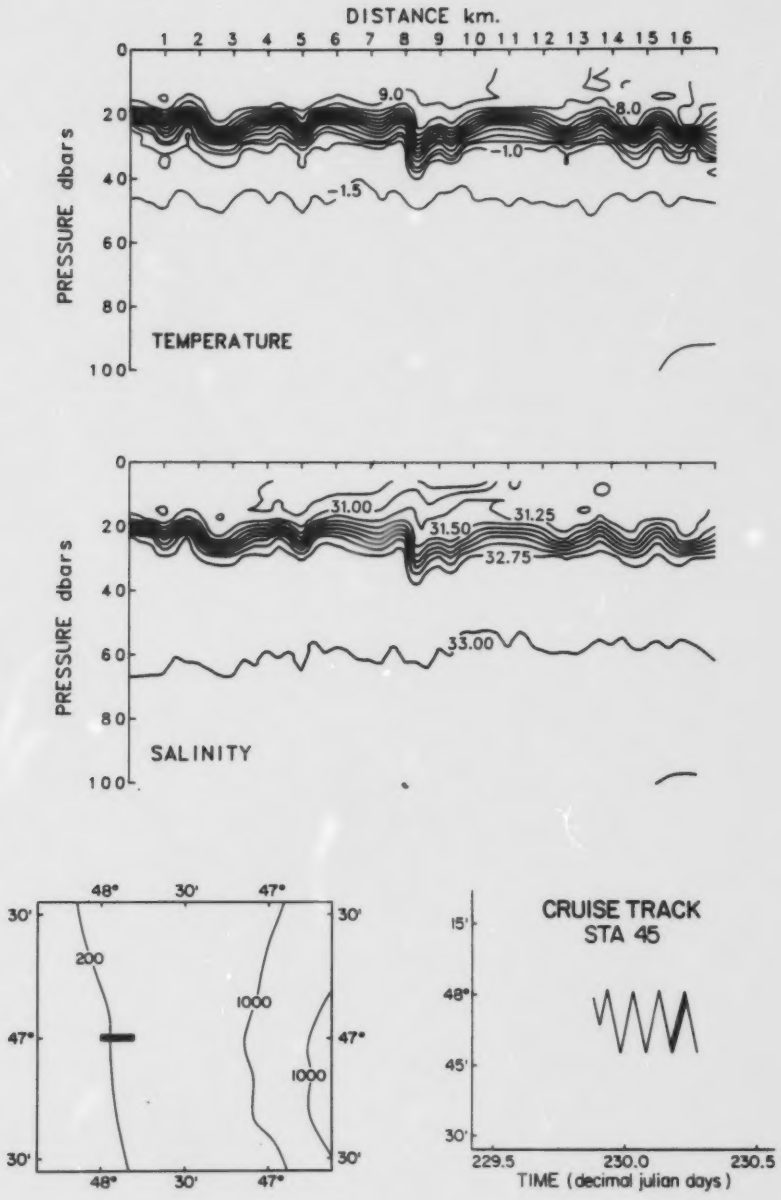

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
31.50
31.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
45'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 41

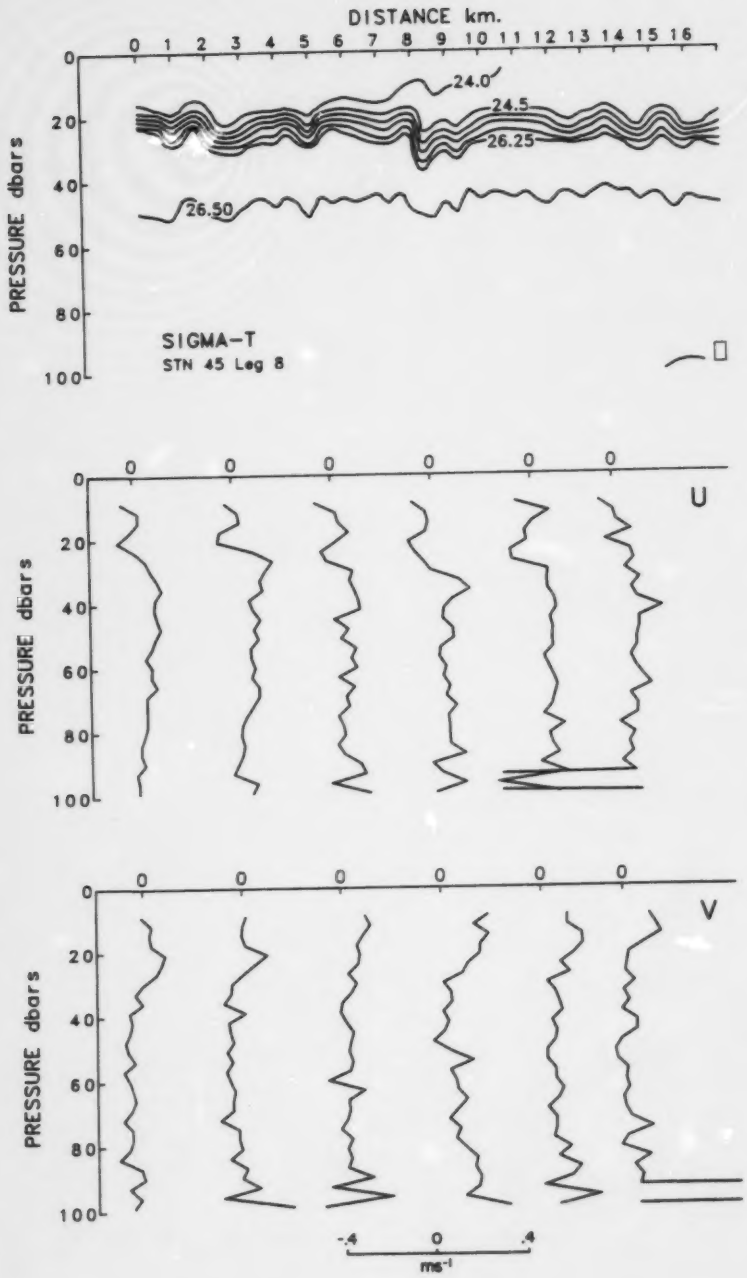

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 45 Leg 8
U
V
0 0 0 0 0 0
-.4 0 .4
ms⁻¹

Fig 42

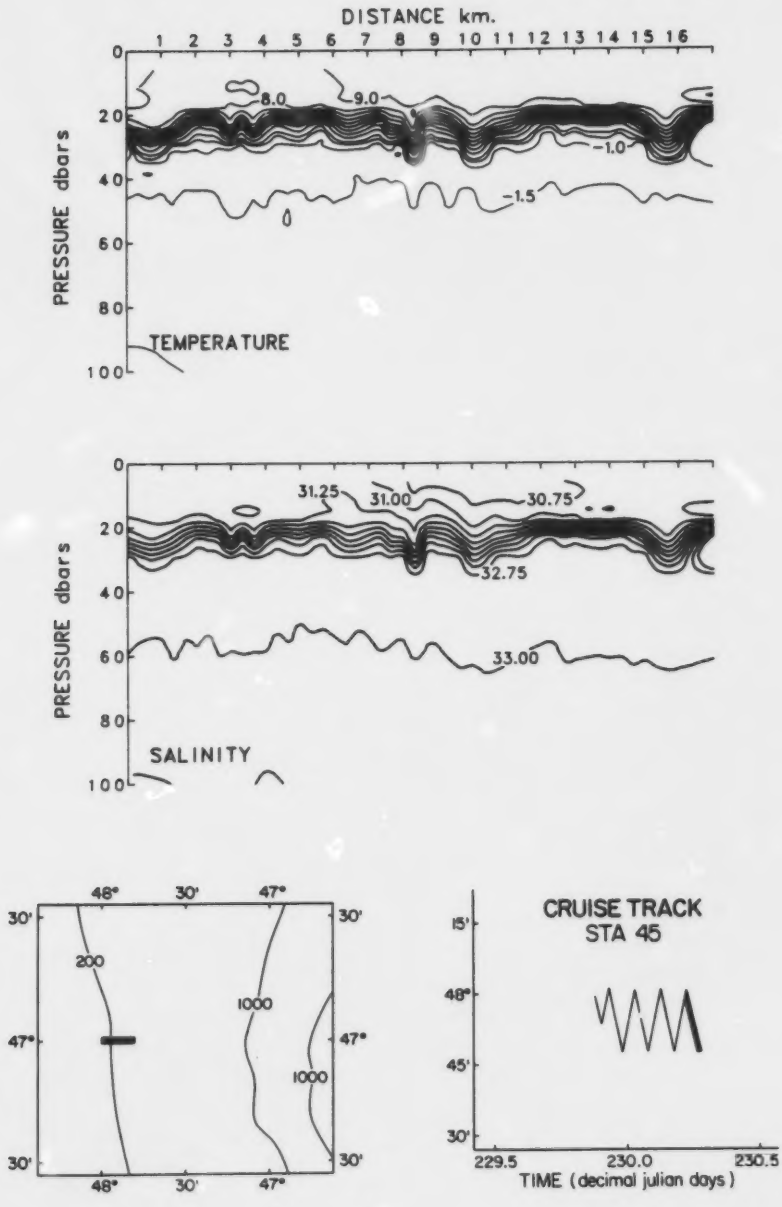

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
8.0
9.0
-1.0
-1.5
TEMPERATURE
31.25
31.00
30.75
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 45
15'
45'
229.5
230.0
230.5
TIME (decimal julian days)

Fig. 43

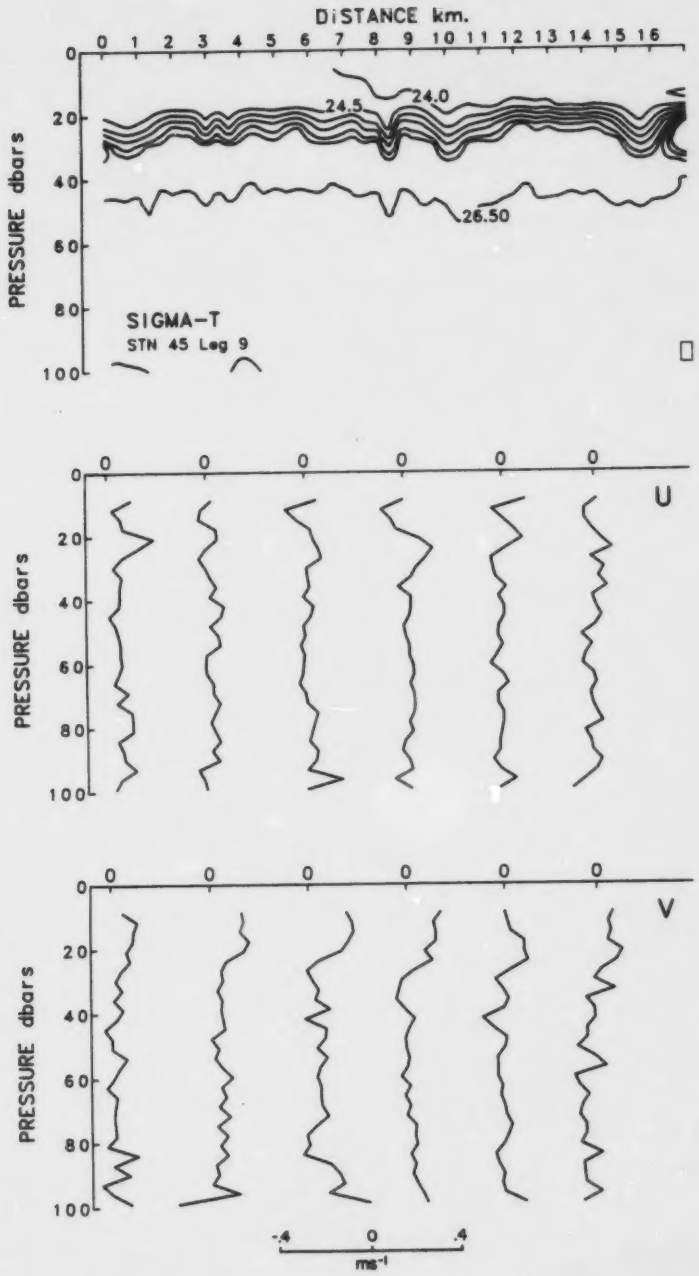
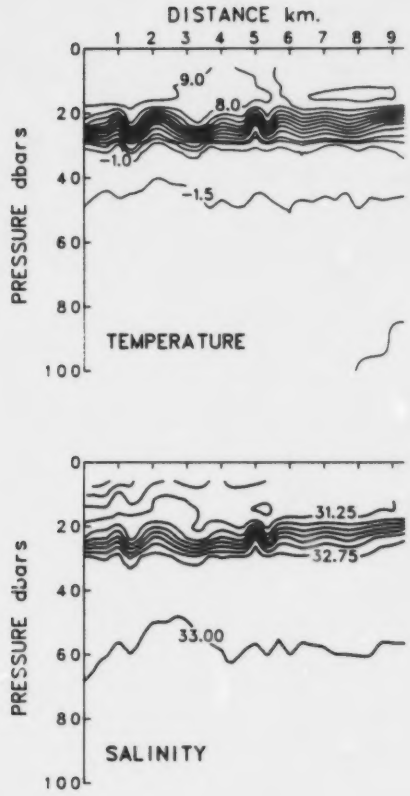

DiSTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.5
24.0
26.50
SIGMA-T
STN 45 Leg 9
U
V
-.4
0
.4
ms⁻¹

Fig 44

Figures 45-56

BATFISH station 46; 6 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP (Acoustic Doppler Current Profiler), location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. The relative spacing of the U and V profiles reflects their relative position in the section. The null line of the first U and V profile is aligned vertically with the origin of the Sigma-t section.


DISTANCE km.
1 2 3 4 5 6 7 8 9
0
20
40
60
80
100
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.25
32.75
33.00
SALINITY

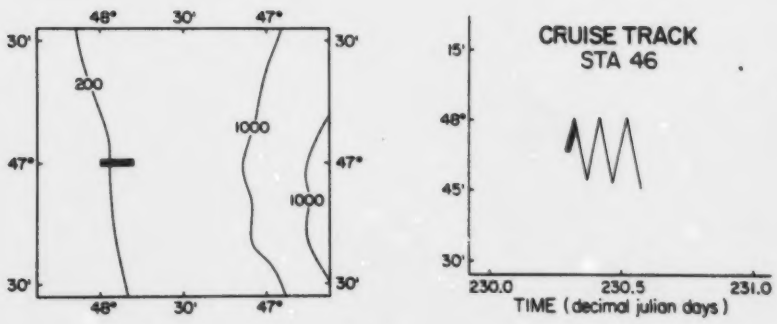

48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 46
15'
45'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 45

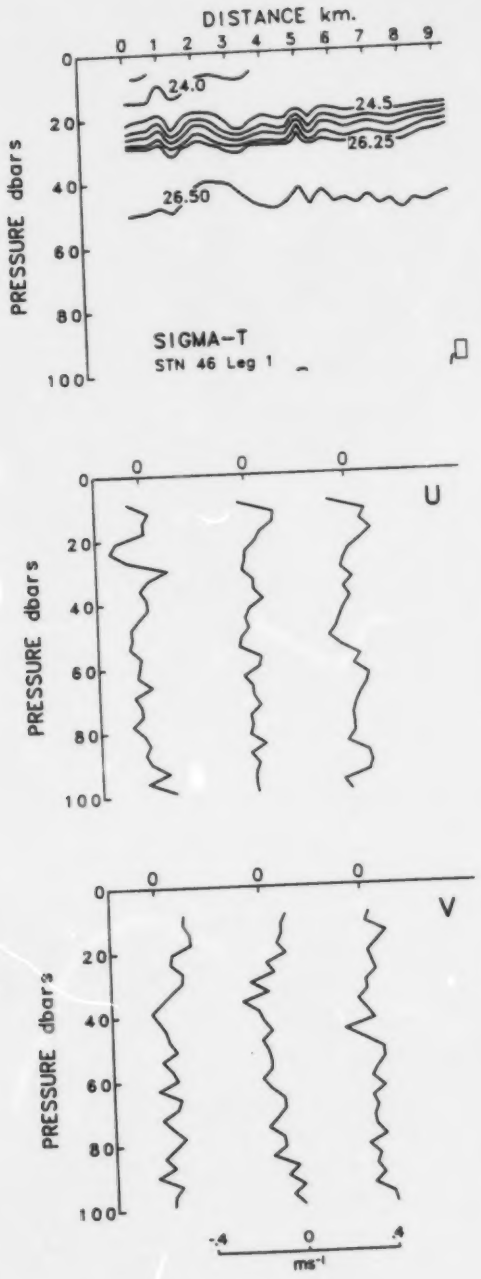

DISTANCE km.
0 1 2 3 4 5 6 7 8 9
24.0
24.5
26.25
26.50
PRESSURE dbars
0
20
40
60
80
100
SIGMA-T
STN 46 Leg 1
U
V
0 0 0
-.4 0 .4
ms⁻¹

Fig. 46

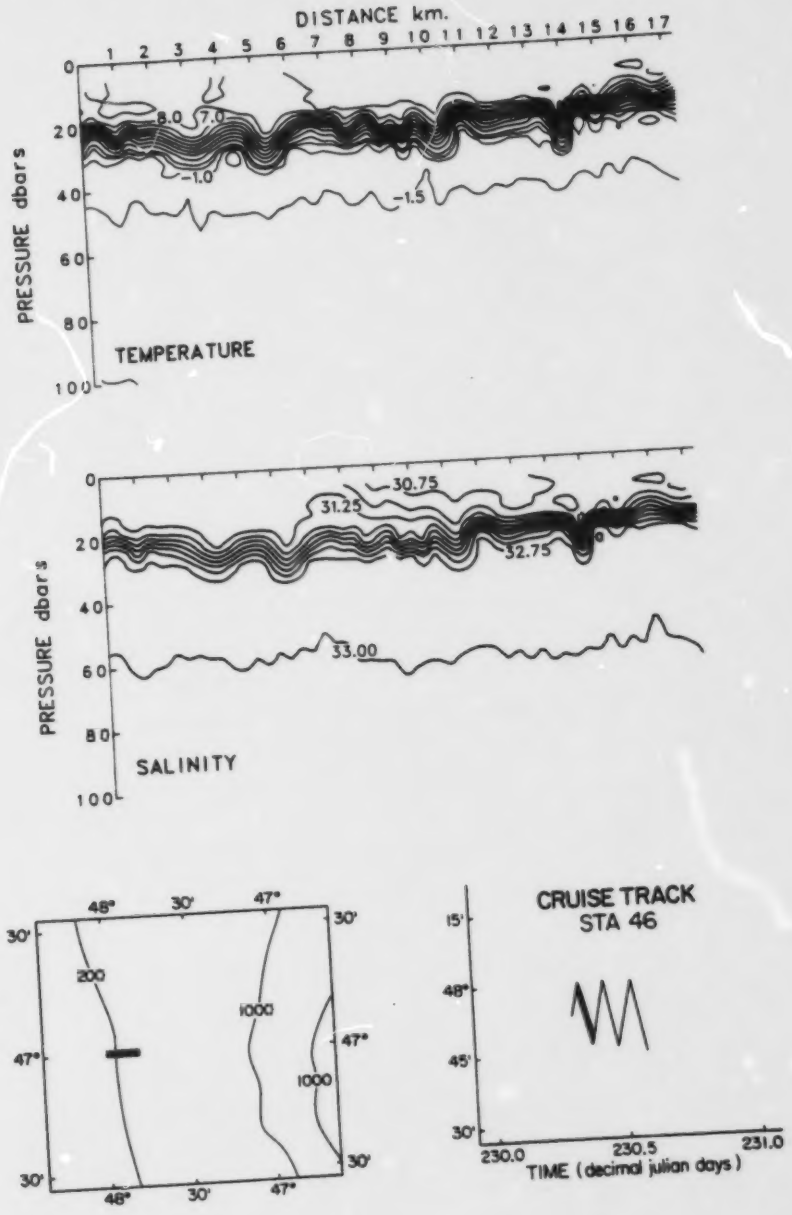

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.5
TEMPERATURE
30.75
31.25
32.75
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 46
15'
48°
45'
30'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 47

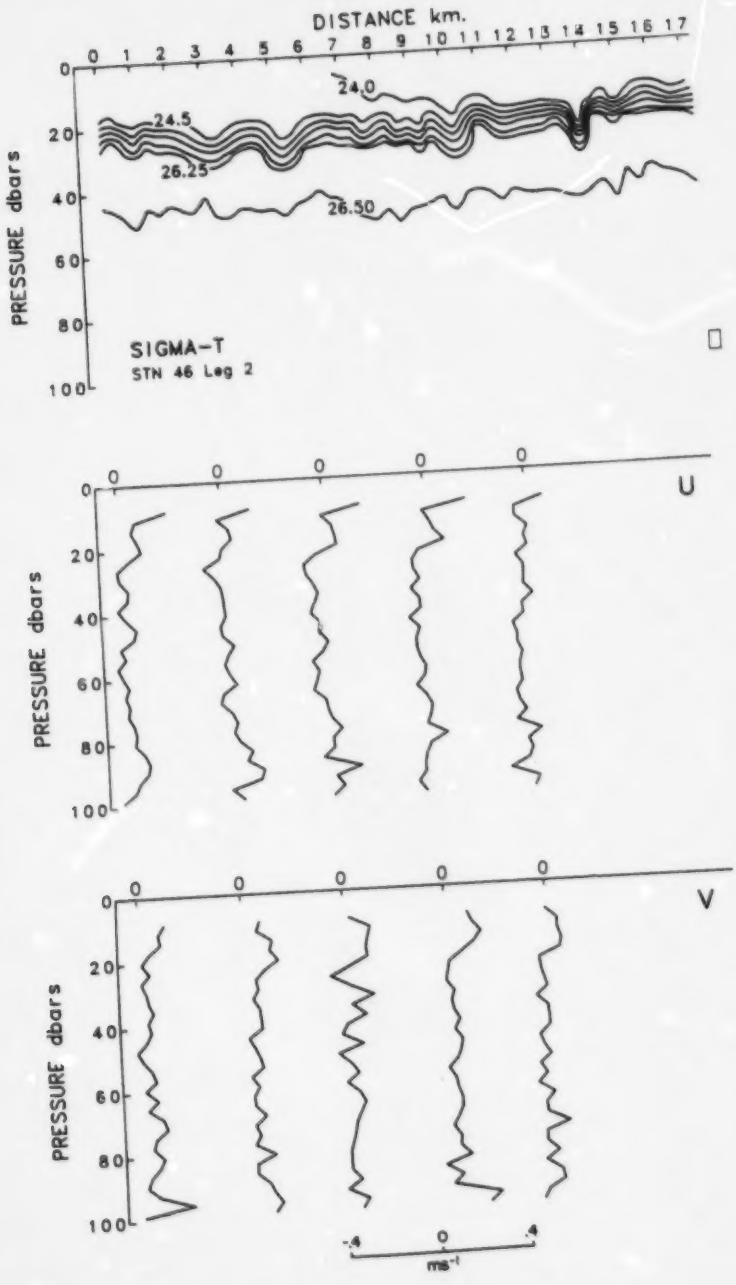

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 46 Leg 2
U
V
0 0 0 0 0
-4 0 4
ms⁻¹

Fig. 48

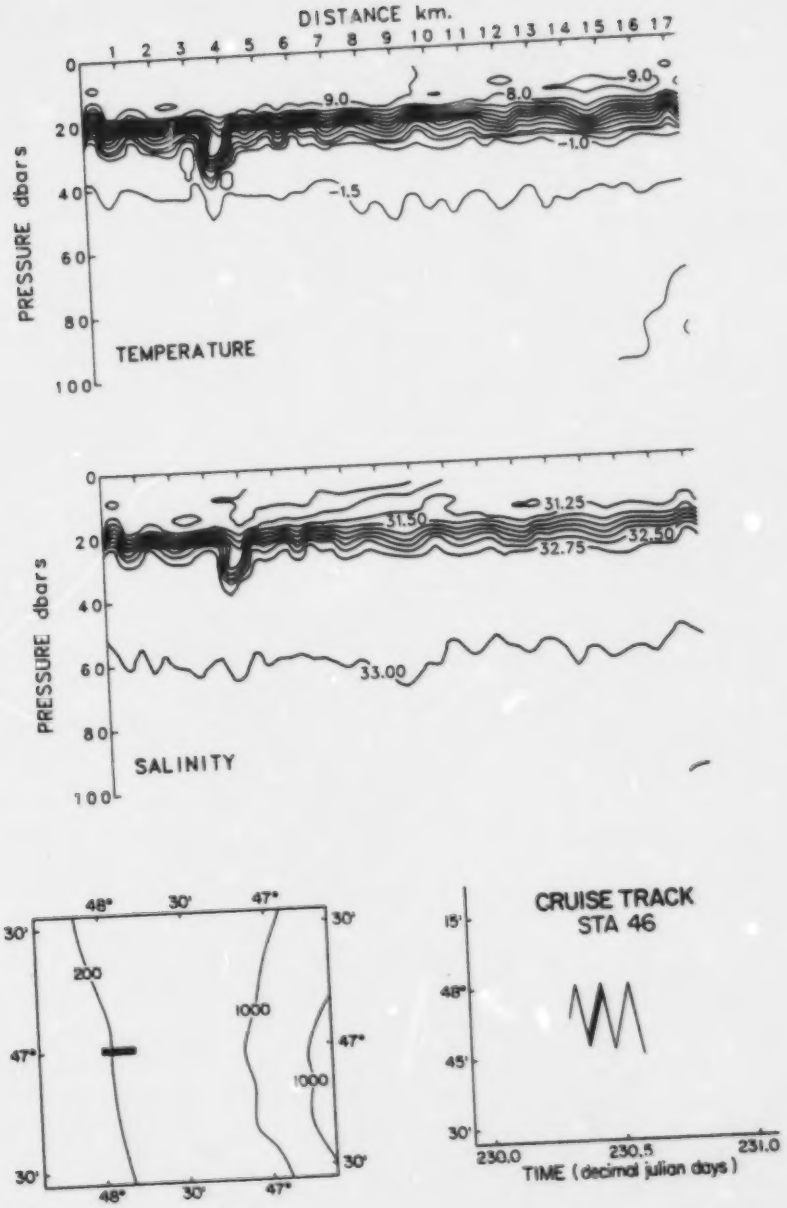

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
9.0
8.0
9.0
-1.0
-1.5
TEMPERATURE
31.25
31.50
32.75
32.50
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 46
15'
48°
45'
30'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 49

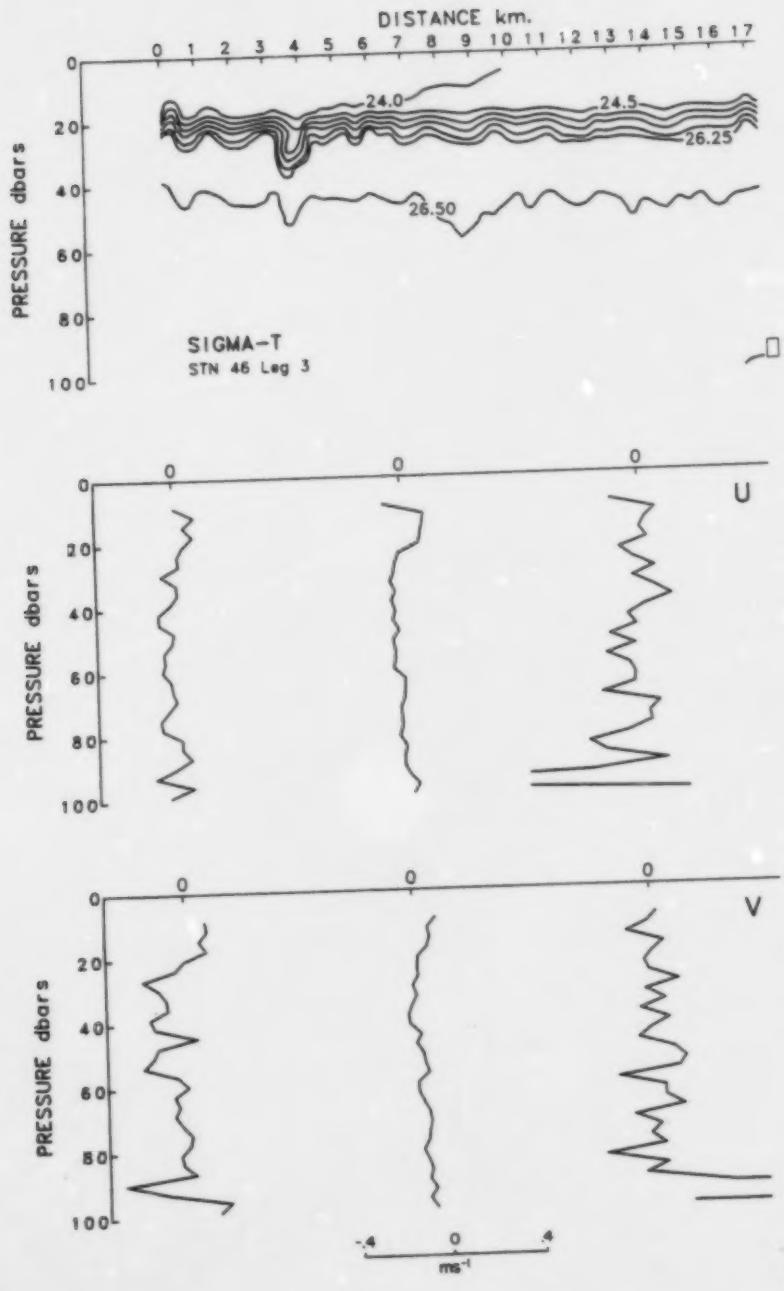

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 46 Leg 3
U
V
0
-.4
.4
ms⁻¹

Fig. 50

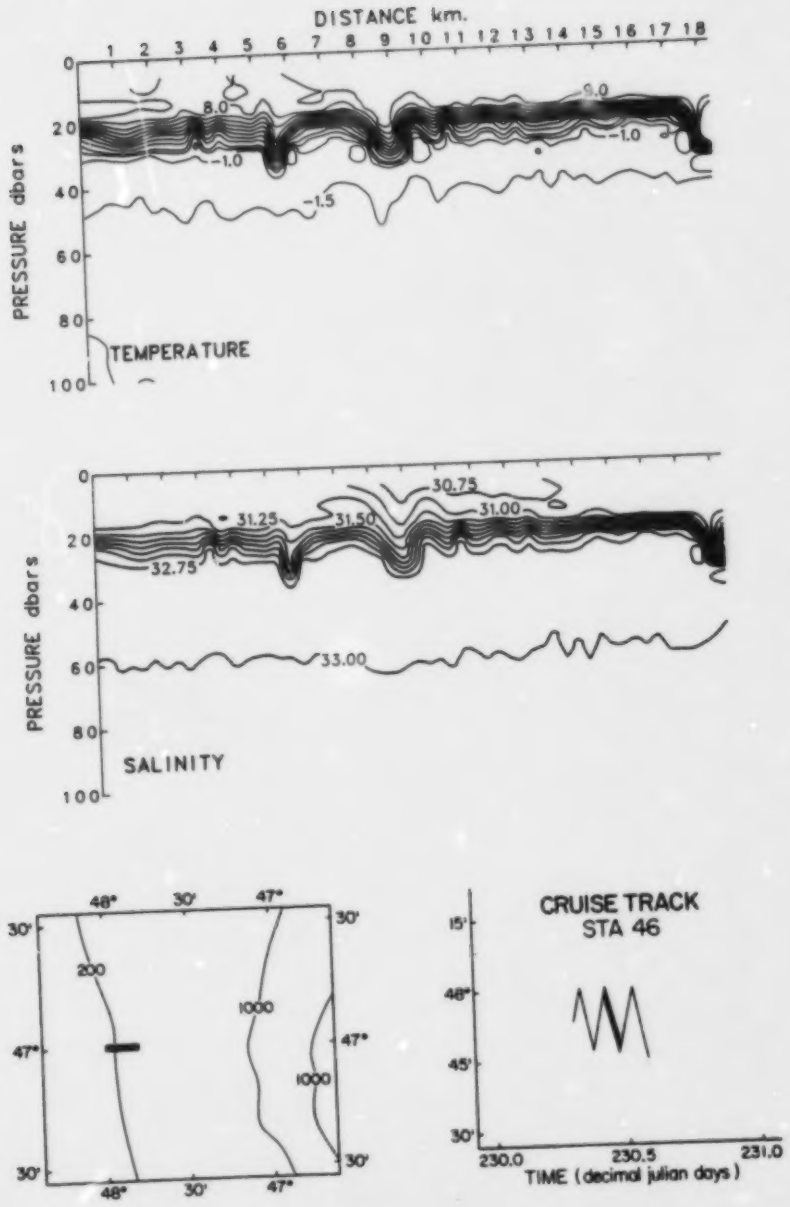

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
0
20
40
60
80
100
PRESSURE dbars
8.0
-1.0
-1.5
-1.0
TEMPERATURE
30.75
31.25
31.50
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 46
15'
45'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 51

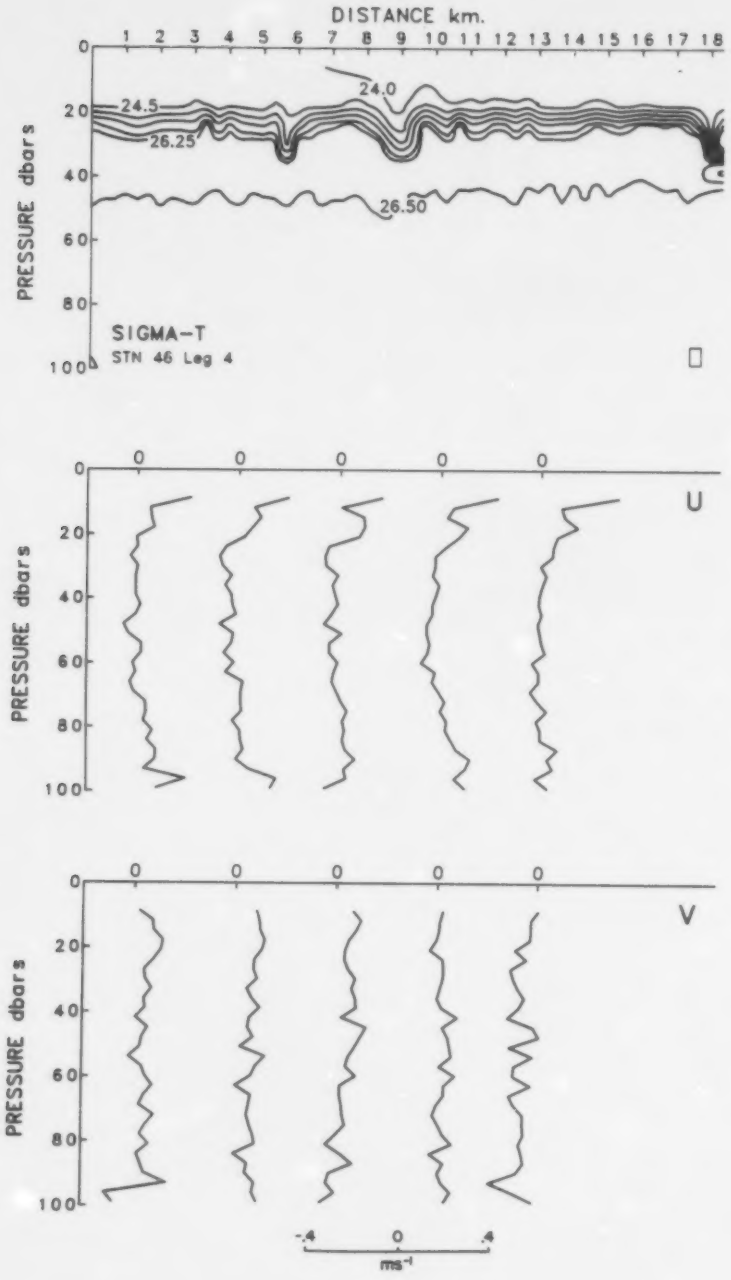

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
0
20
40
60
80
100
PRESSURE dbars
24.0
24.5
26.25
26.50
SIGMA-T
STN 46 Leg 4
U
V
0 0 0 0 0
-.4 0 .4
ms⁻¹

Fig 52

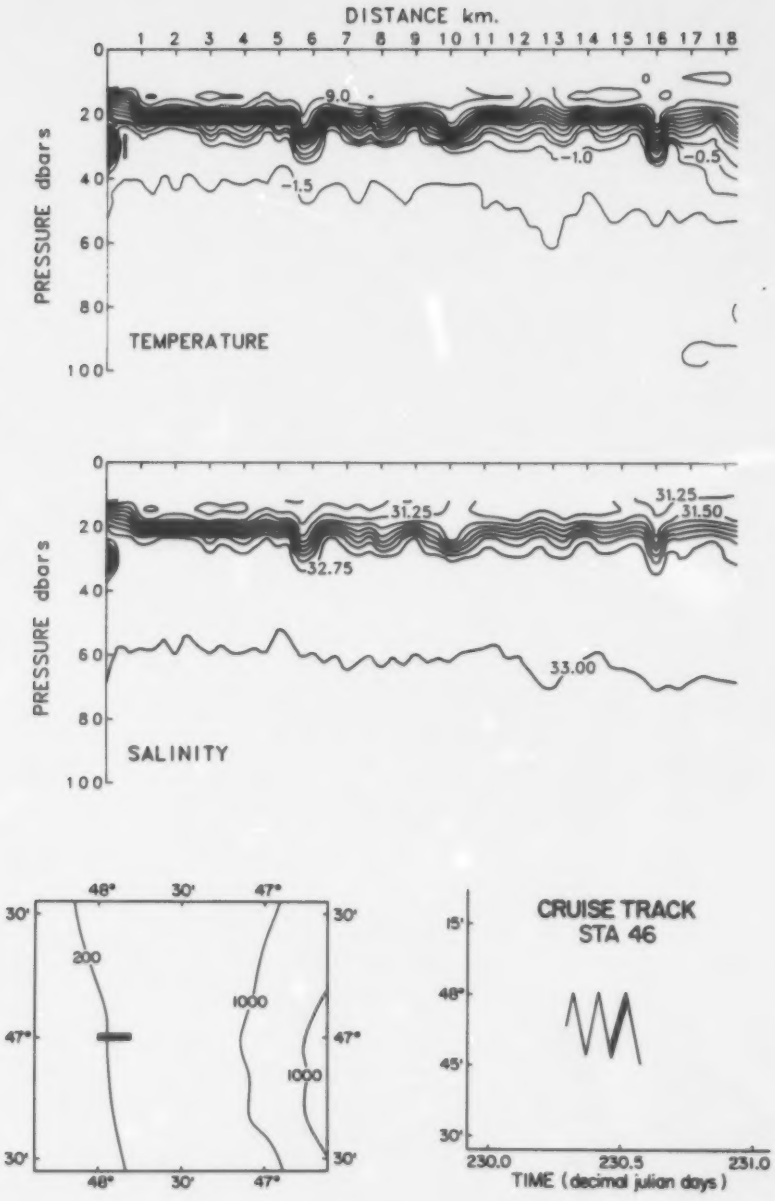

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
PRESSURE dbars
0
20
40
60
80
100
9.0
0
-1.0
-0.5
-1.5
TEMPERATURE
31.25
31.25
31.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 46
15'
48°
45'
30'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 53

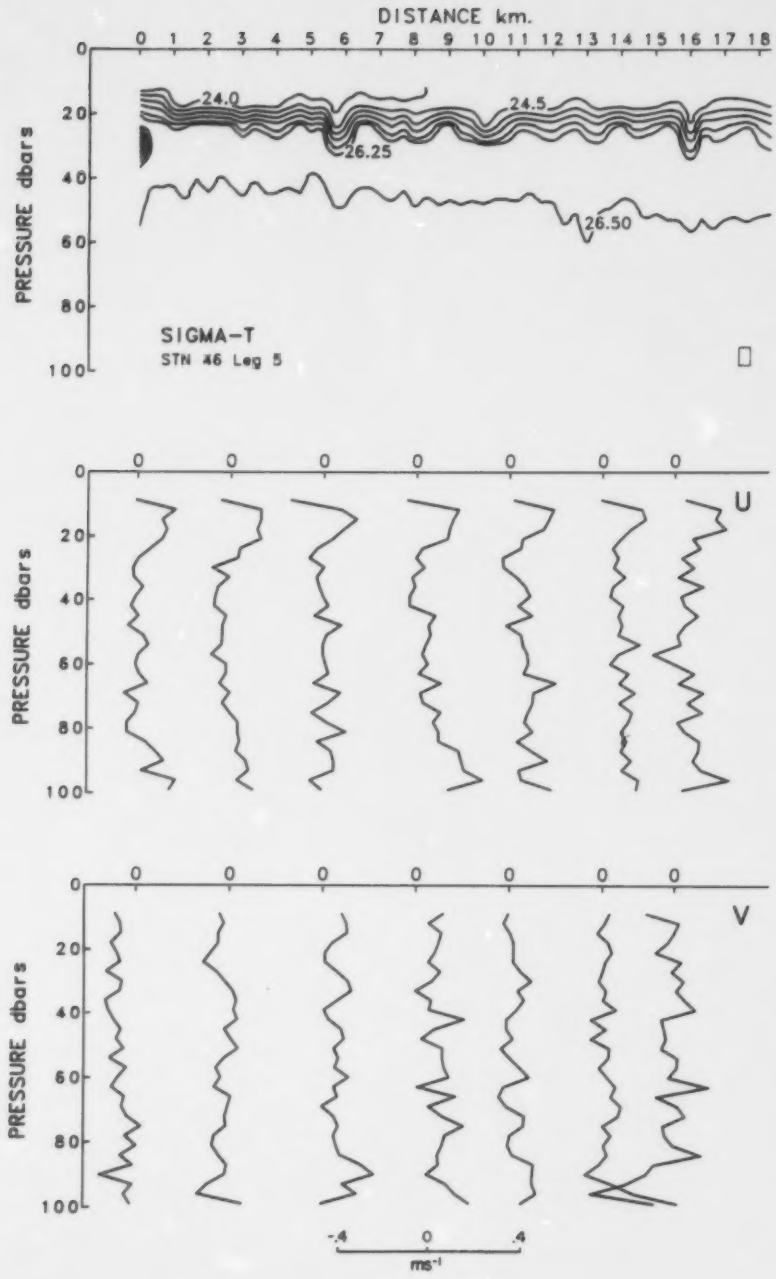

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 46 Leg 5
U
V
-.4
0
.4
ms⁻¹

Fig. 54

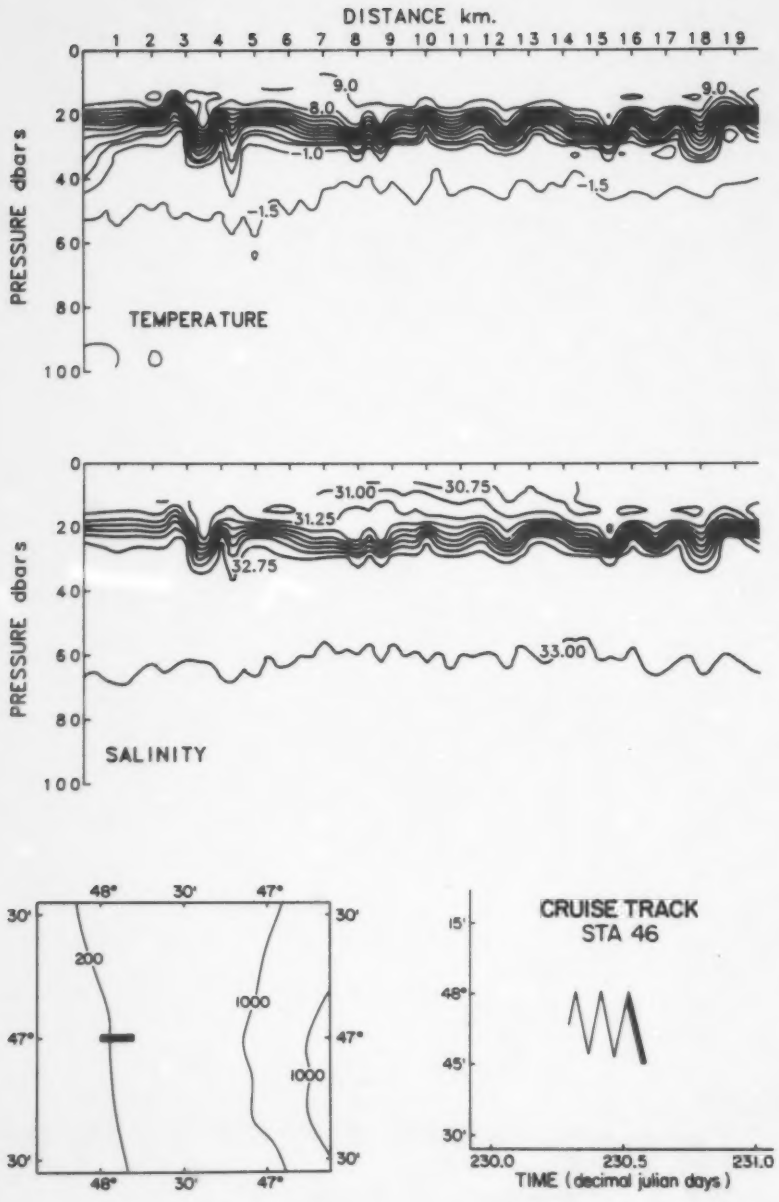

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
0
20
40
60
80
100
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
30.75
31.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 46
15'
45'
230.0
230.5
231.0
TIME (decimal julian days)

Fig. 55

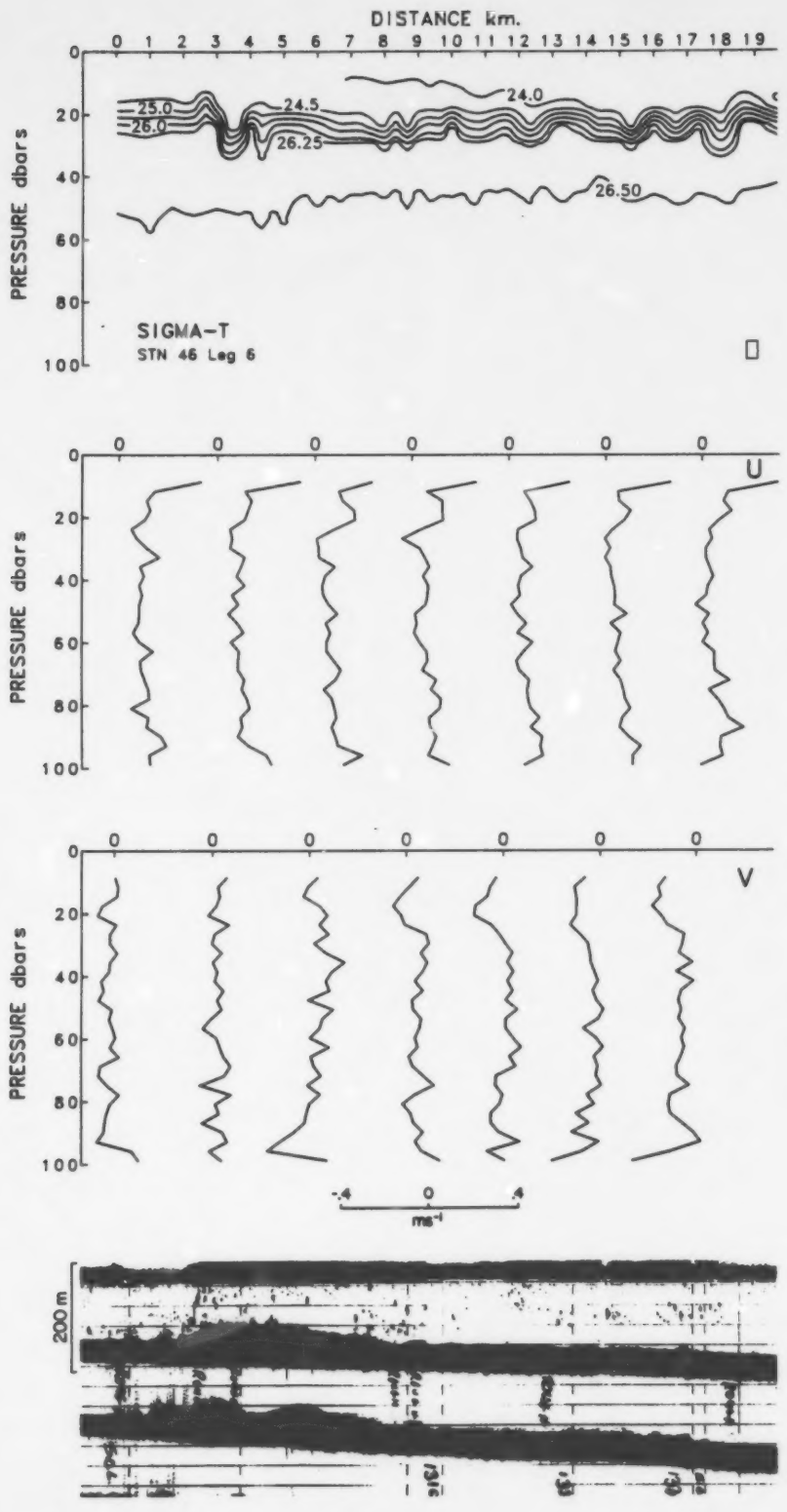

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
PRESSURE dbars
0
20
40
60
80
100
25.0
26.0
24.5
26.25
24.0
26.50
SIGMA-T
STN 46 Leg 6
U
V
-.4
0
.4
ms⁻¹
200 m

Fig. 56

Figures 57-82

BATFISH station 48; 13 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP (Acoustic Doppler Current Profiler), location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. The relative spacing of the U and V profiles reflects their relative position in the section. The null line of the first U and V profile is aligned vertically with the origin of the Sigma-t section.

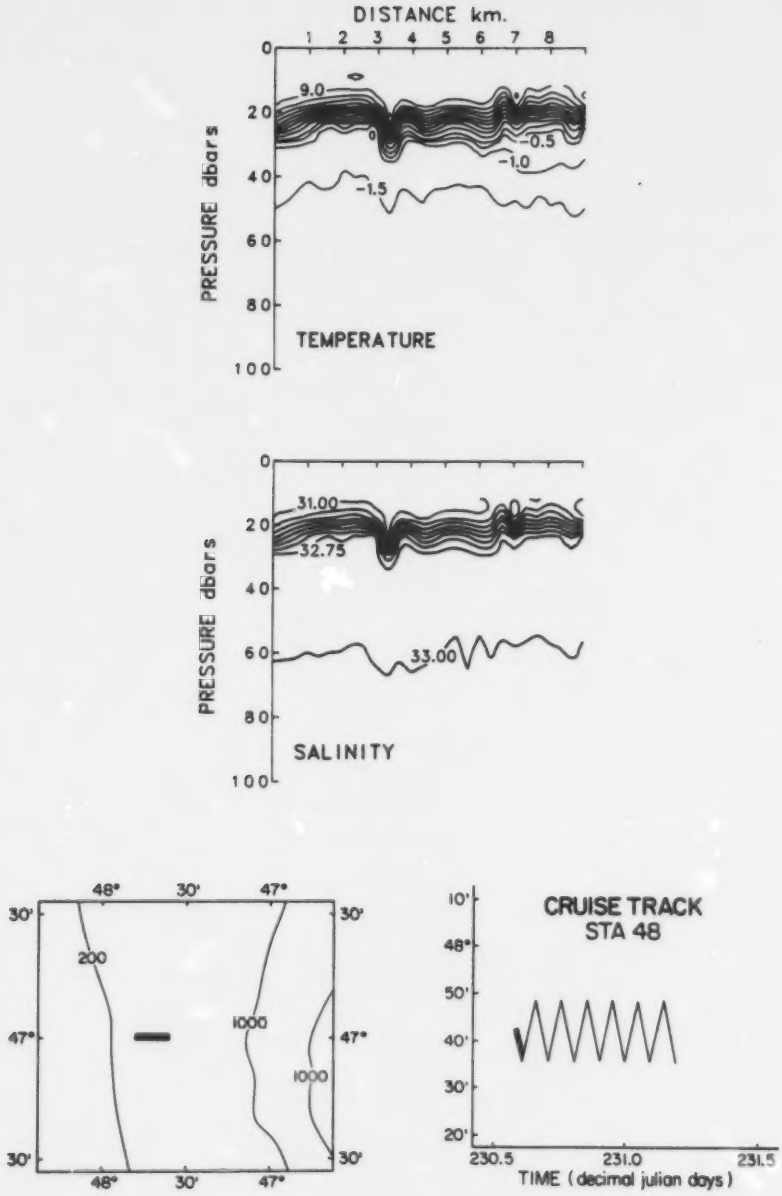

DISTANCE km.
1 2 3 4 5 6 7 8
0
20
40
60
80
100
PRESSURE dbars
9.0
0
-0.5
-1.0
-1.5
TEMPERATURE
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 48
10'
50'
40'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 57

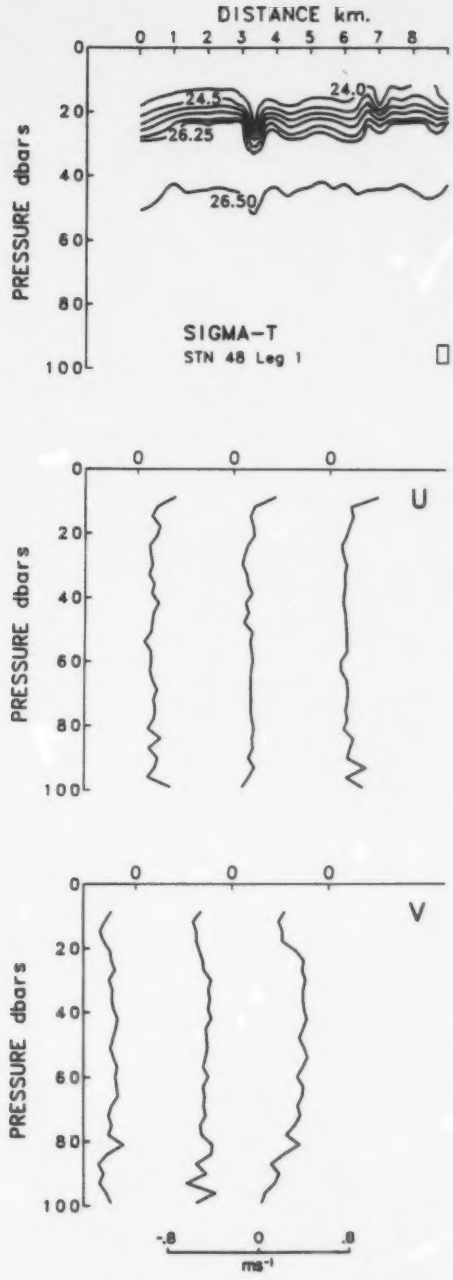

DISTANCE km.
0 1 2 3 4 5 6 7 8
PRESSURE dbars
0
20
40
60
80
100
24.5
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 1
U
V
0 0 0
-.8 0 .8
ms⁻¹

Fig. 58

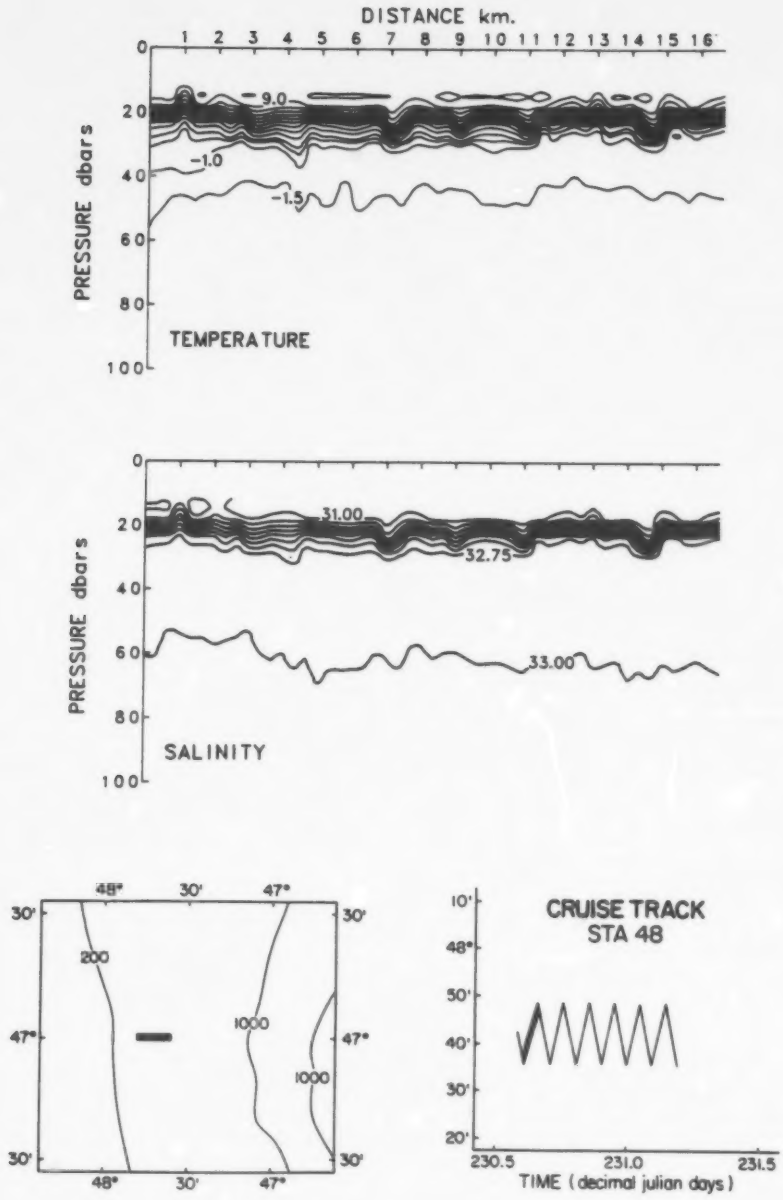

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
1.0
1.5
TEMPERATURE
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 59

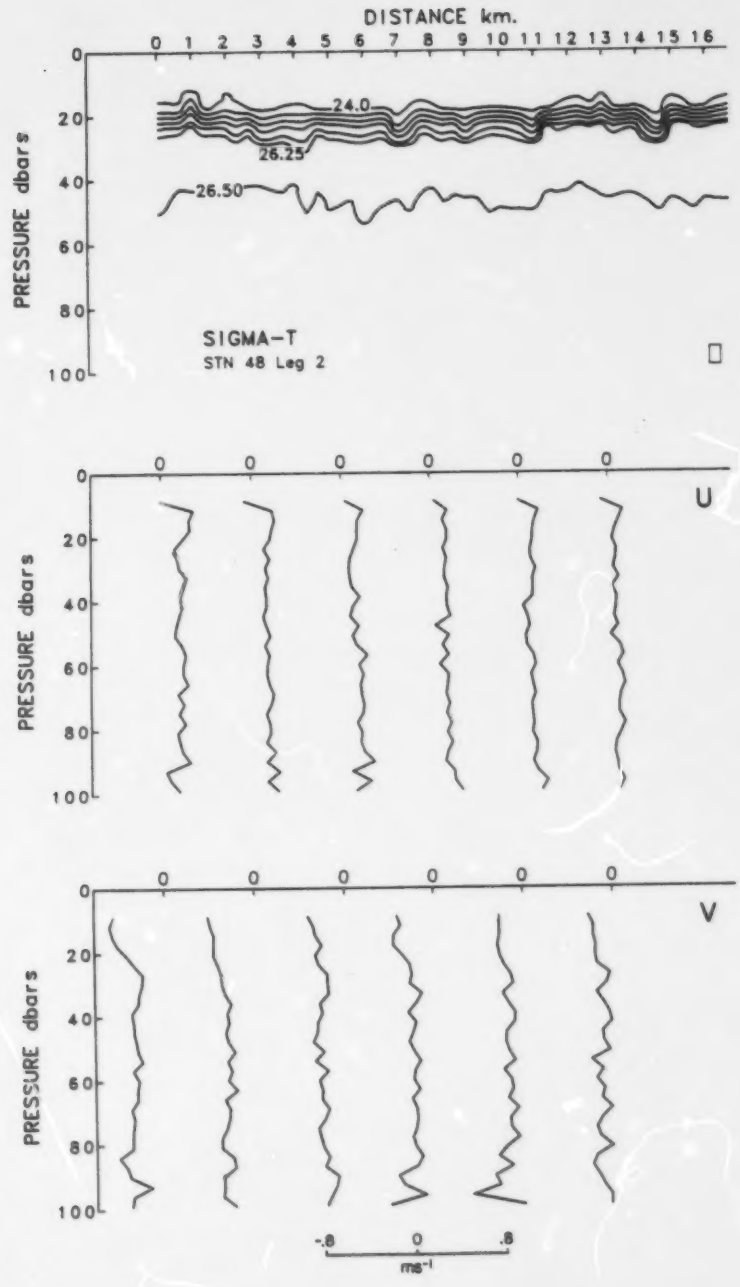
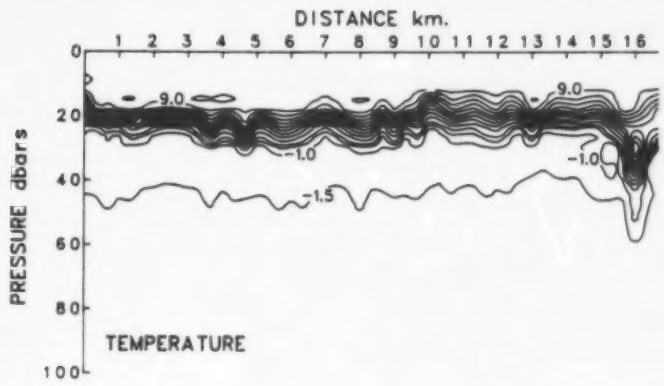
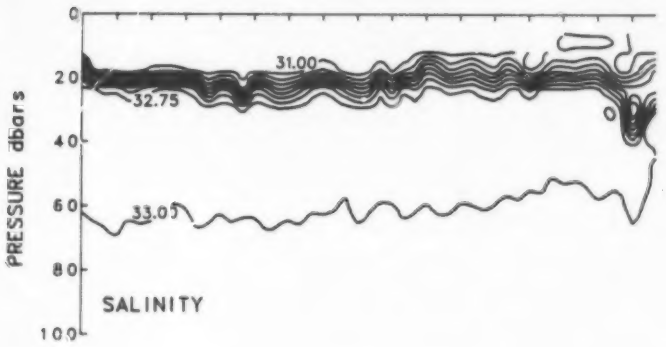
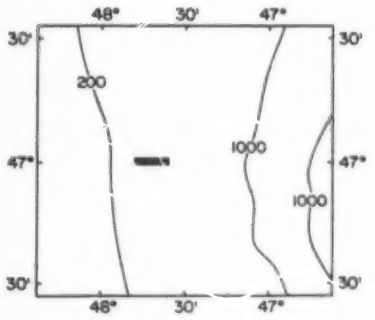

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 2
U
V
-.8
0
.8
ms-1

Fig. 60


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
9.0
-1.0
-1.0
-1.5
TEMPERATURE


0
20
40
60
80
100
PRESSURE dbars
31.00
32.75
33.05
SALINITY


48°
30'
47°
30'
47°
30'
200
1000
1000

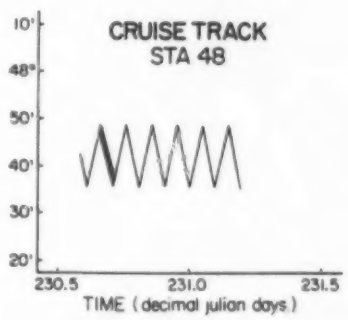

CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 61

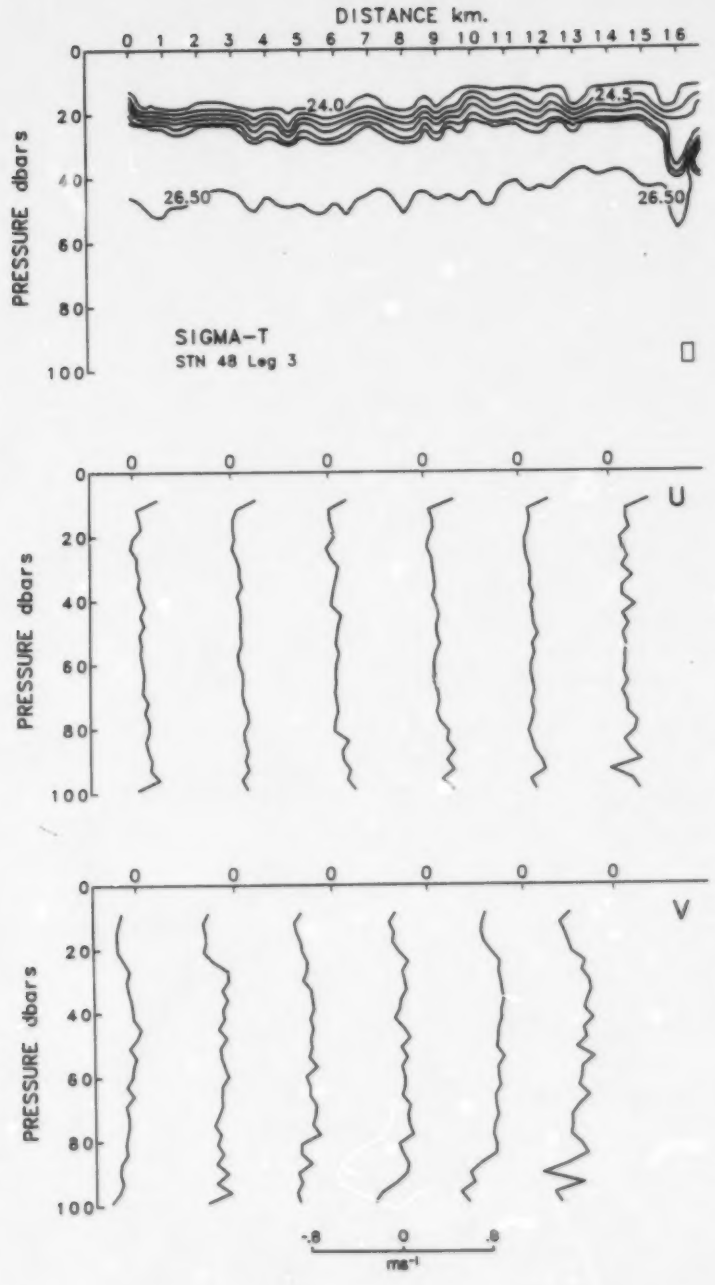

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.50
26.50
SIGMA-T
STN 48 Leg 3
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 62

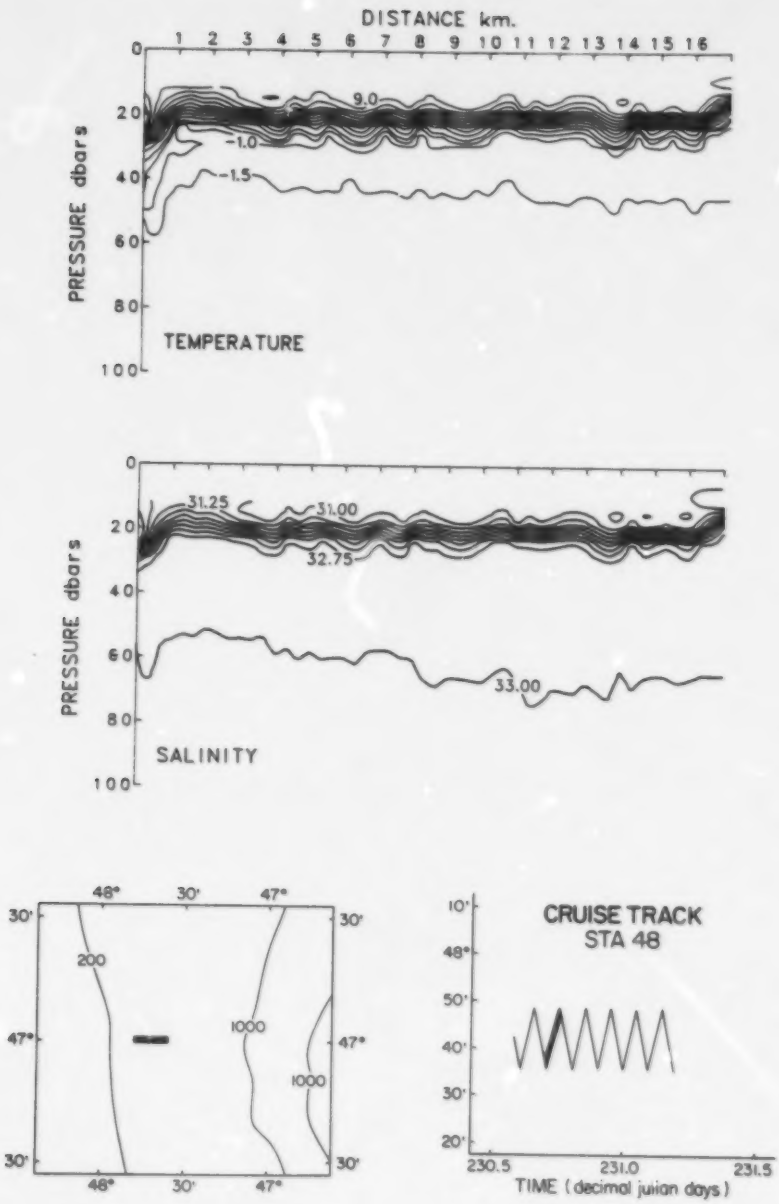

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.25
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 63

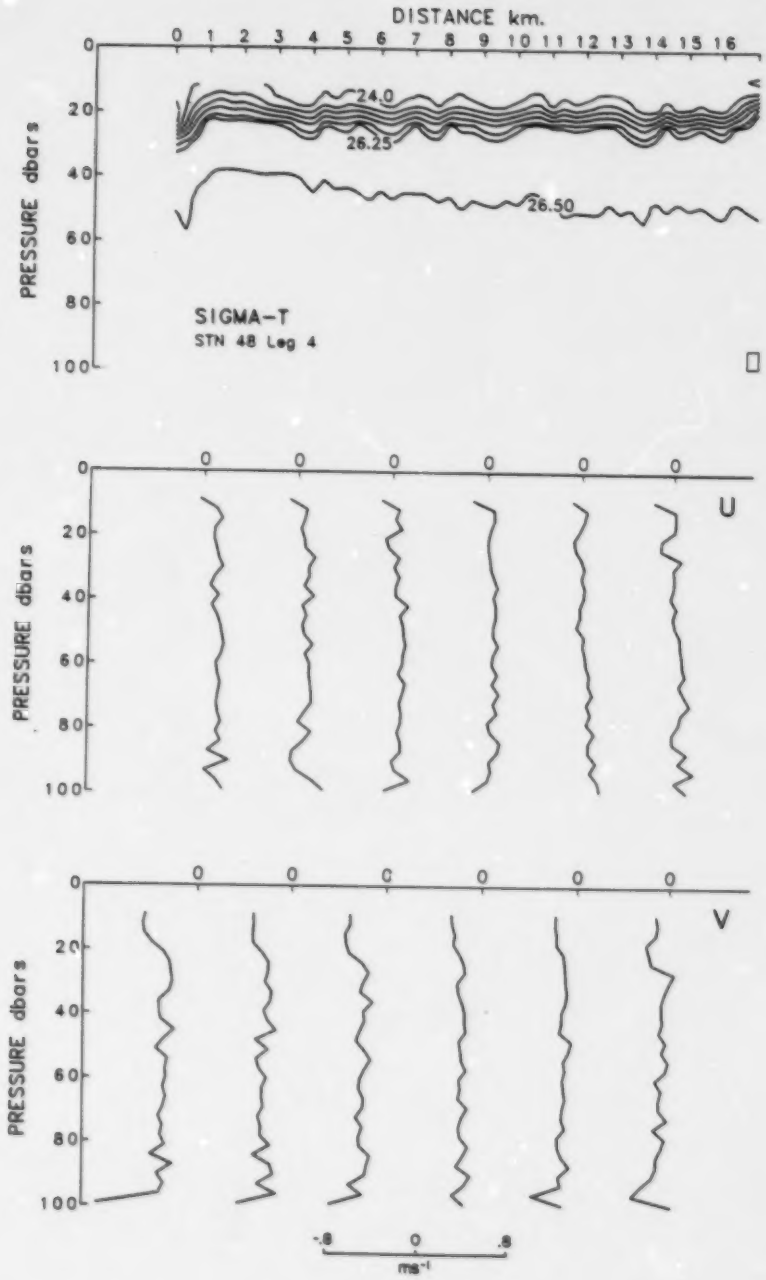

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 4
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 64

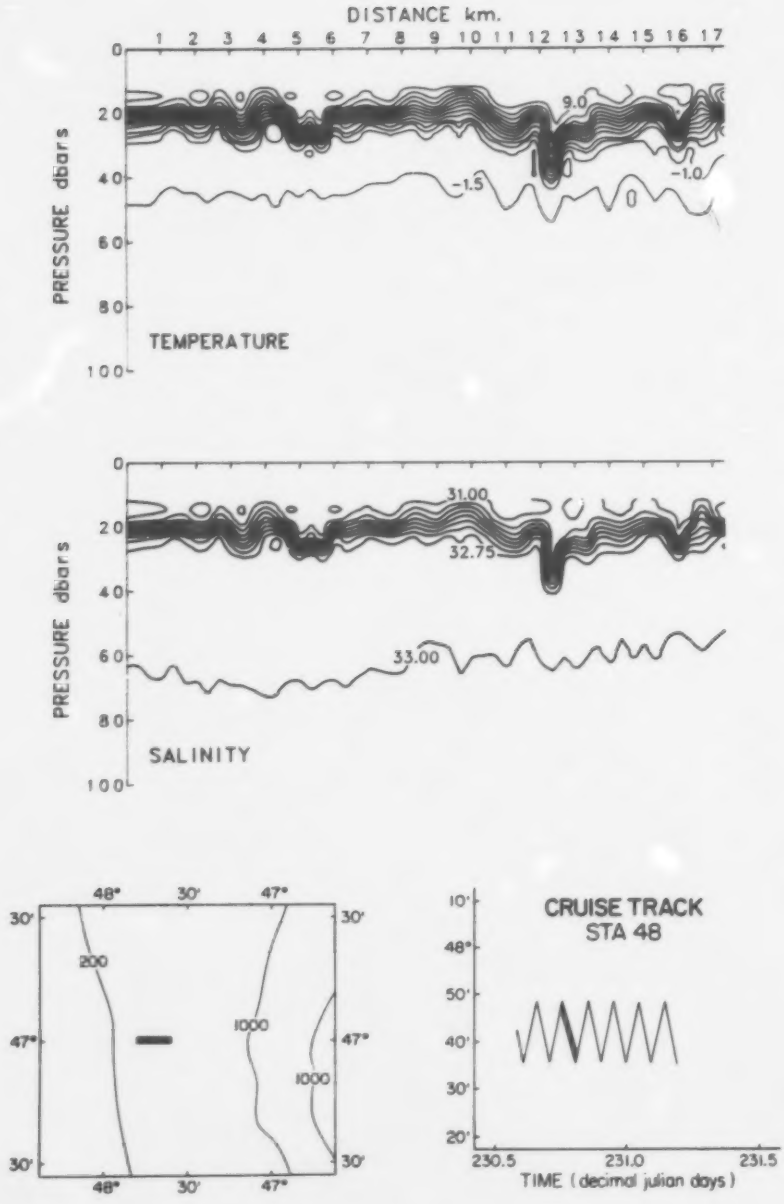

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.5
-1.0
TEMPERATURE
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 65

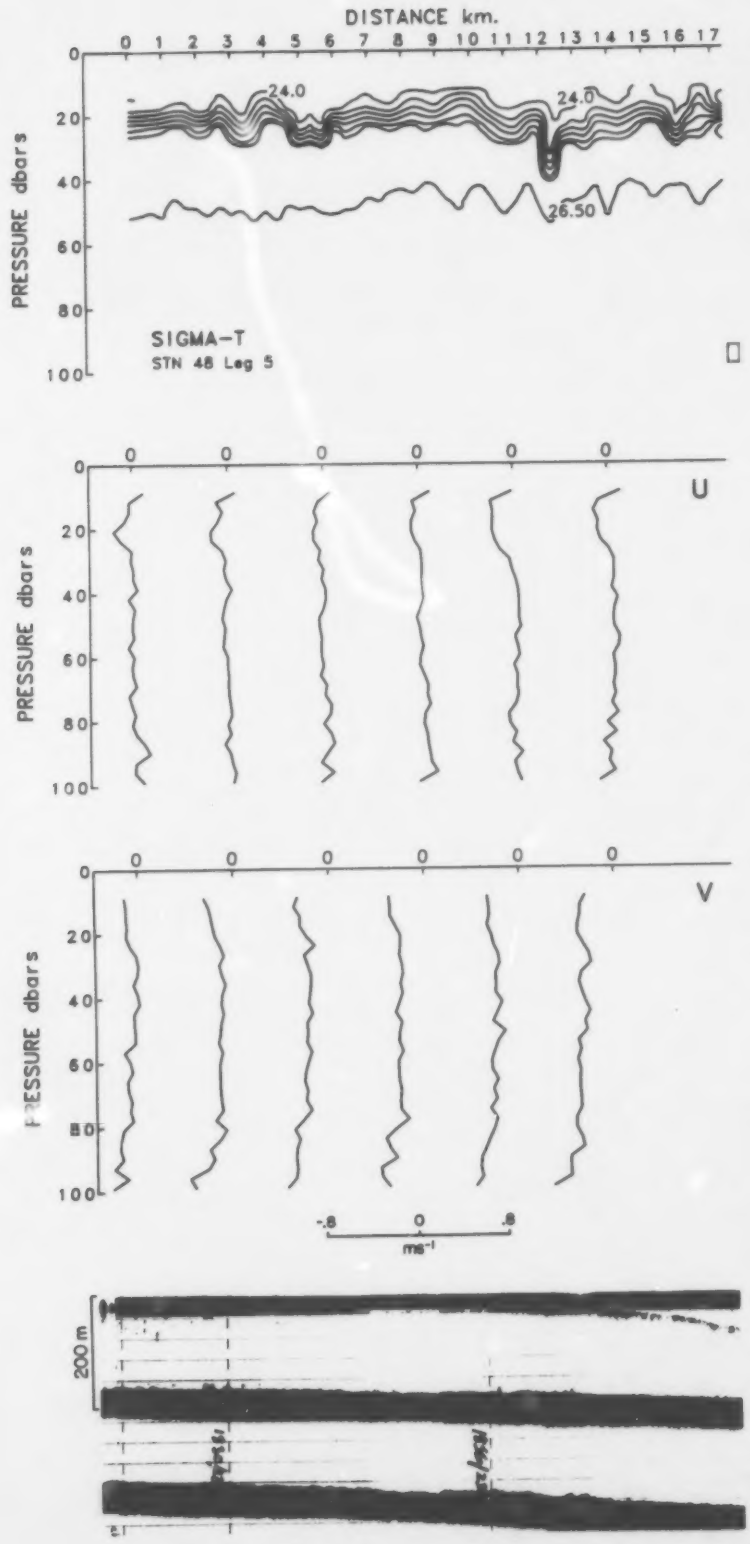

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.0
24.0
26.50
SIGMA-T
STN 48 Leg 5
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 66

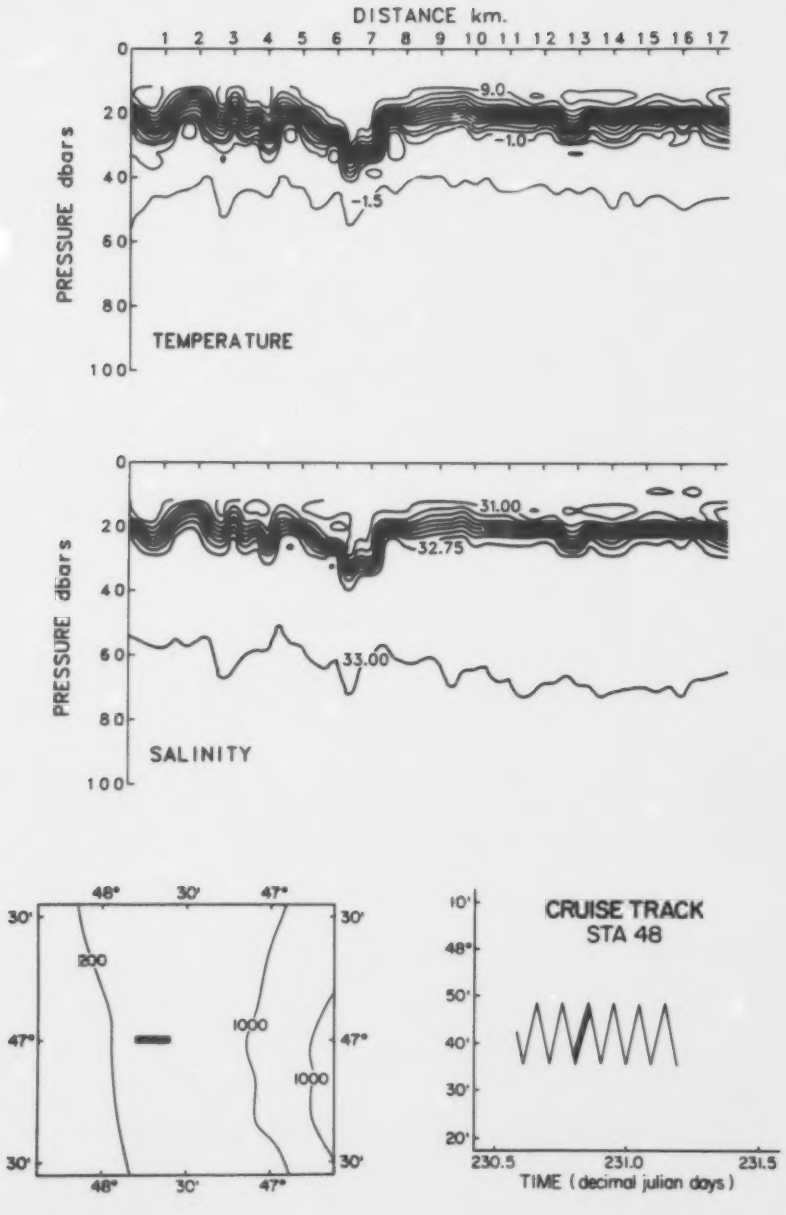

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 67

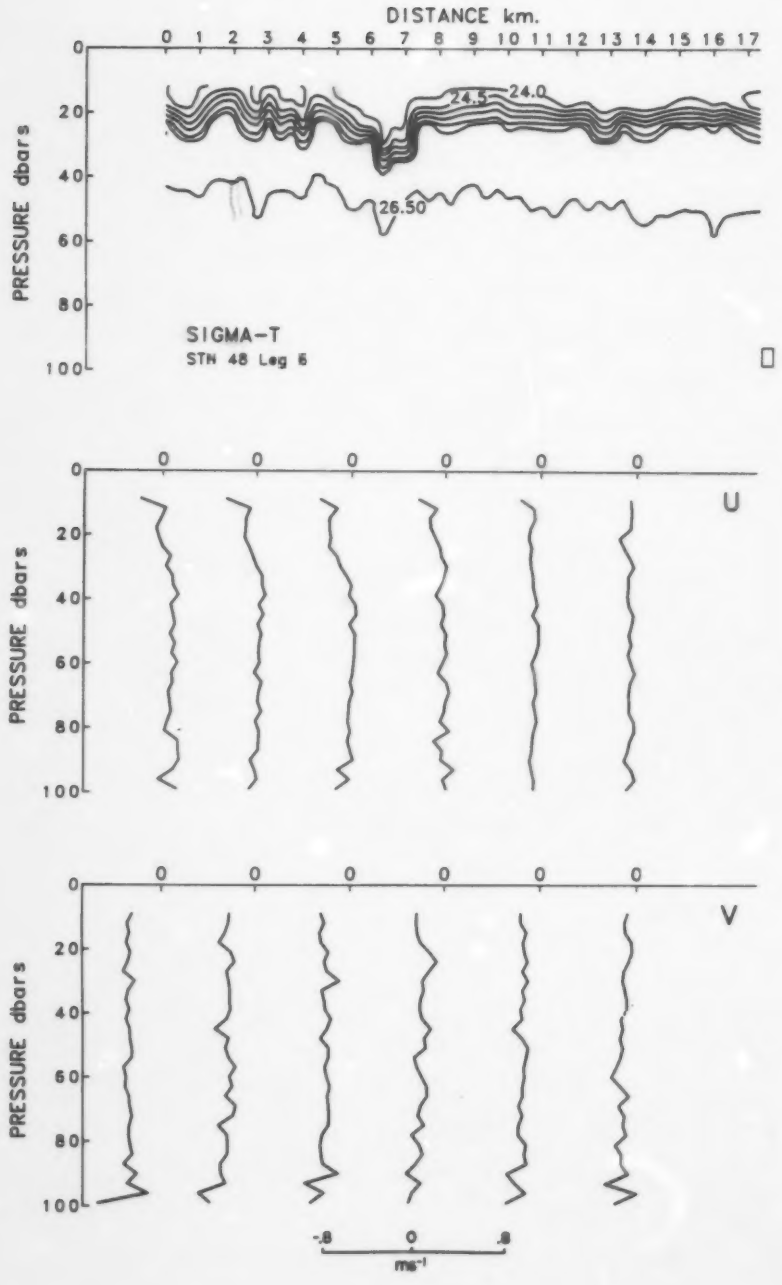

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.5
24.0
26.50
SIGMA-T
STN 48 Leg 6
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 68

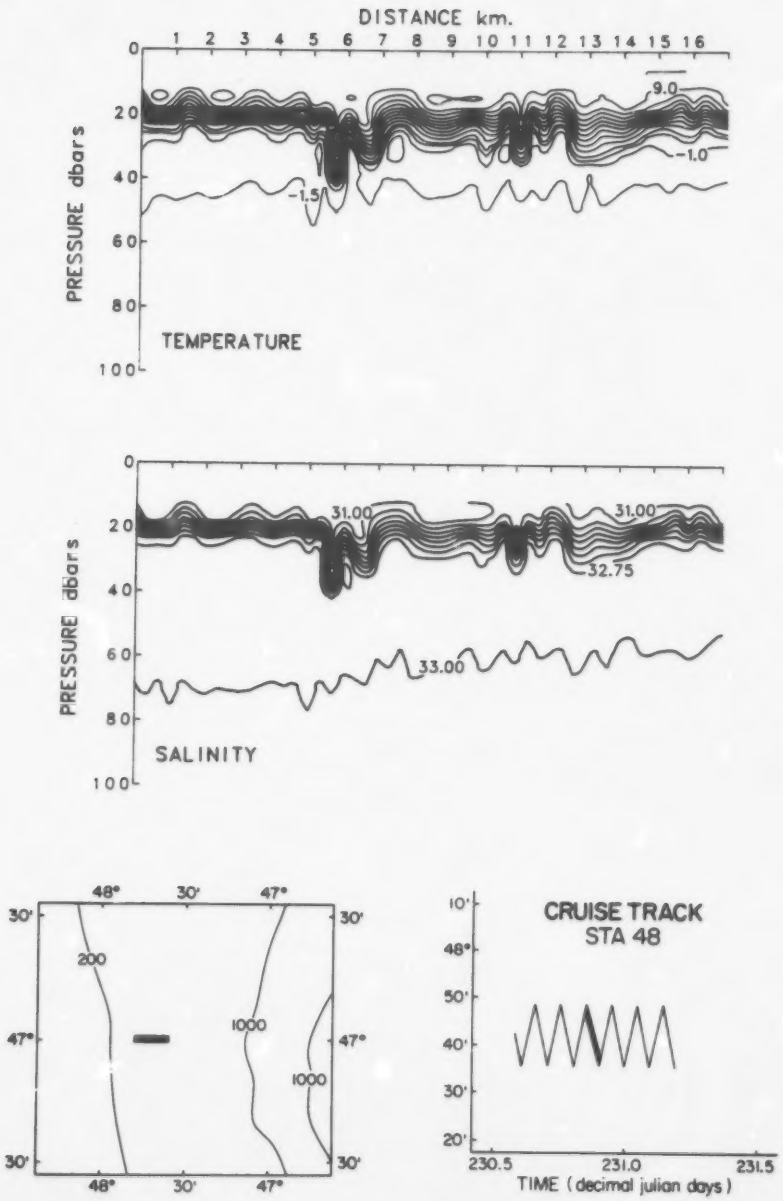

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.00
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 69

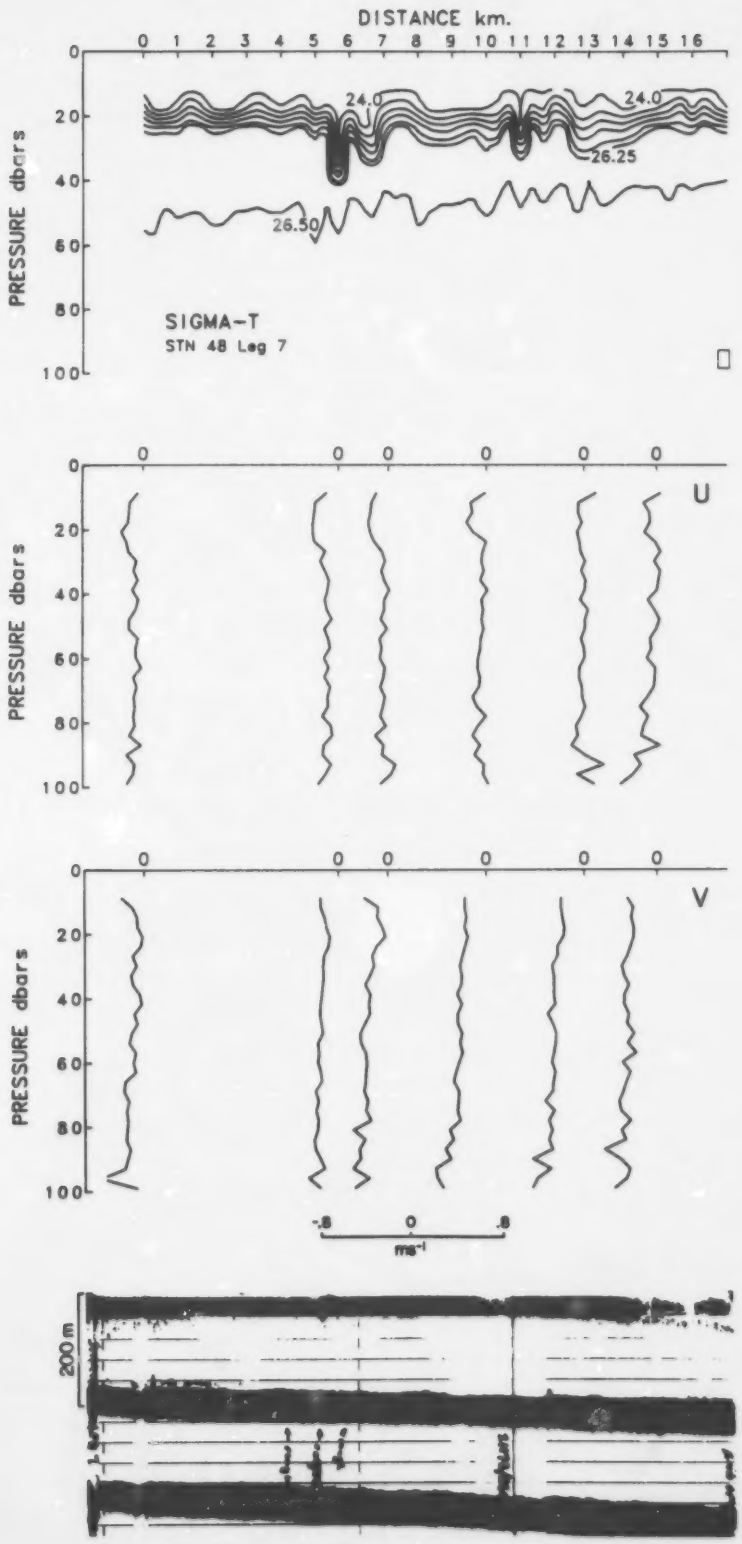

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 7
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 70

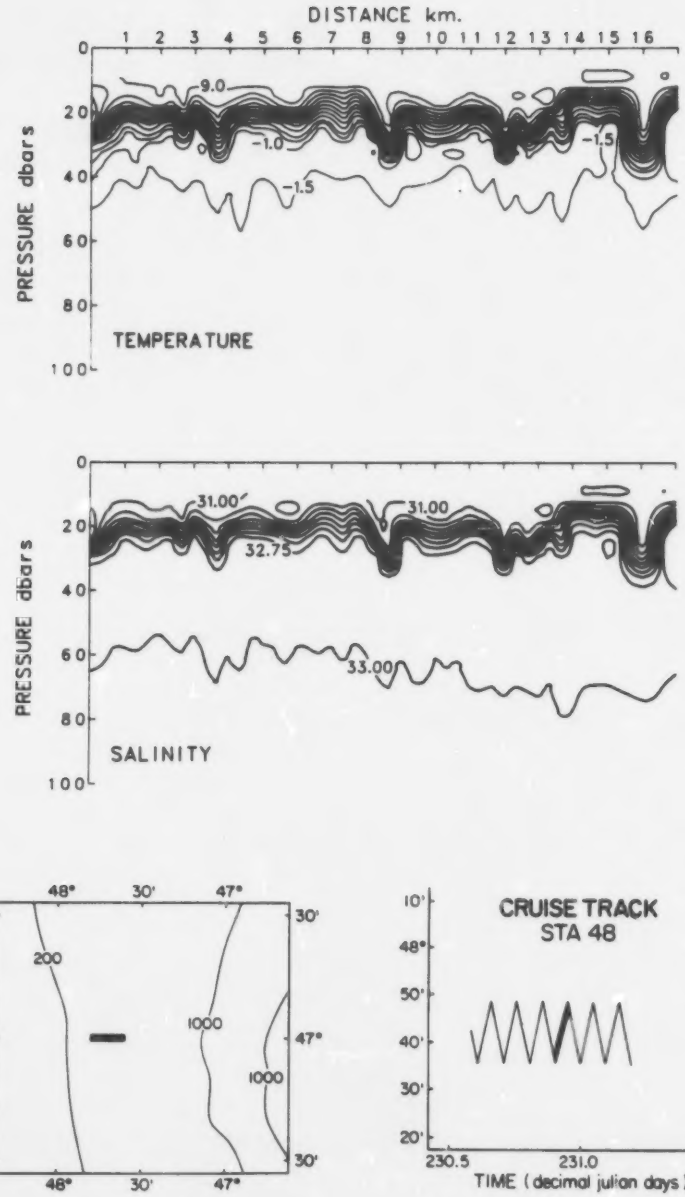

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
-1.5
TEMPERATURE
31.00
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 71

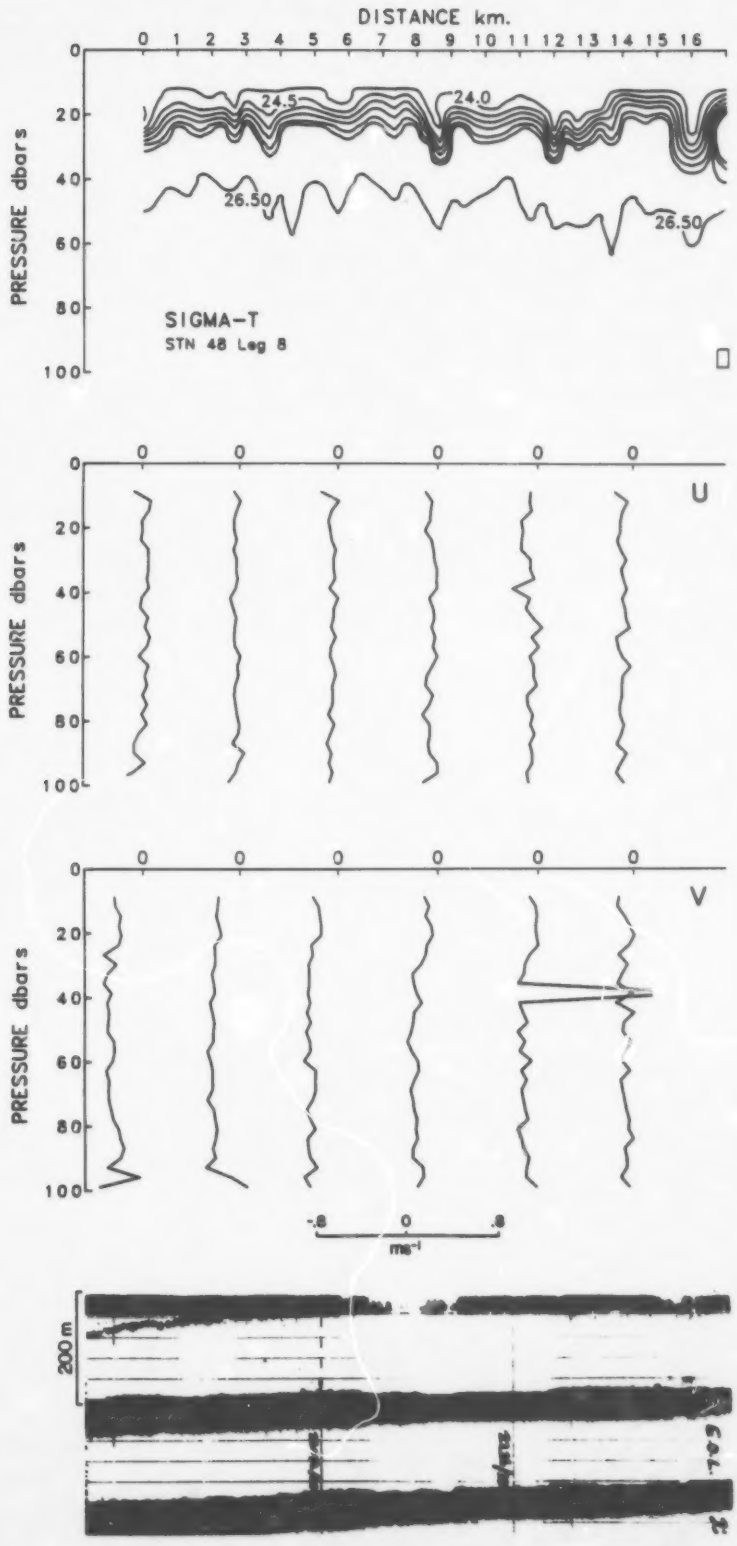

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.5
24.0
26.50
26.50
SIGMA-T
STN 48 Leg 8
U
V
-.8
0
.8
ms⁻¹
200 m

Fig. 72

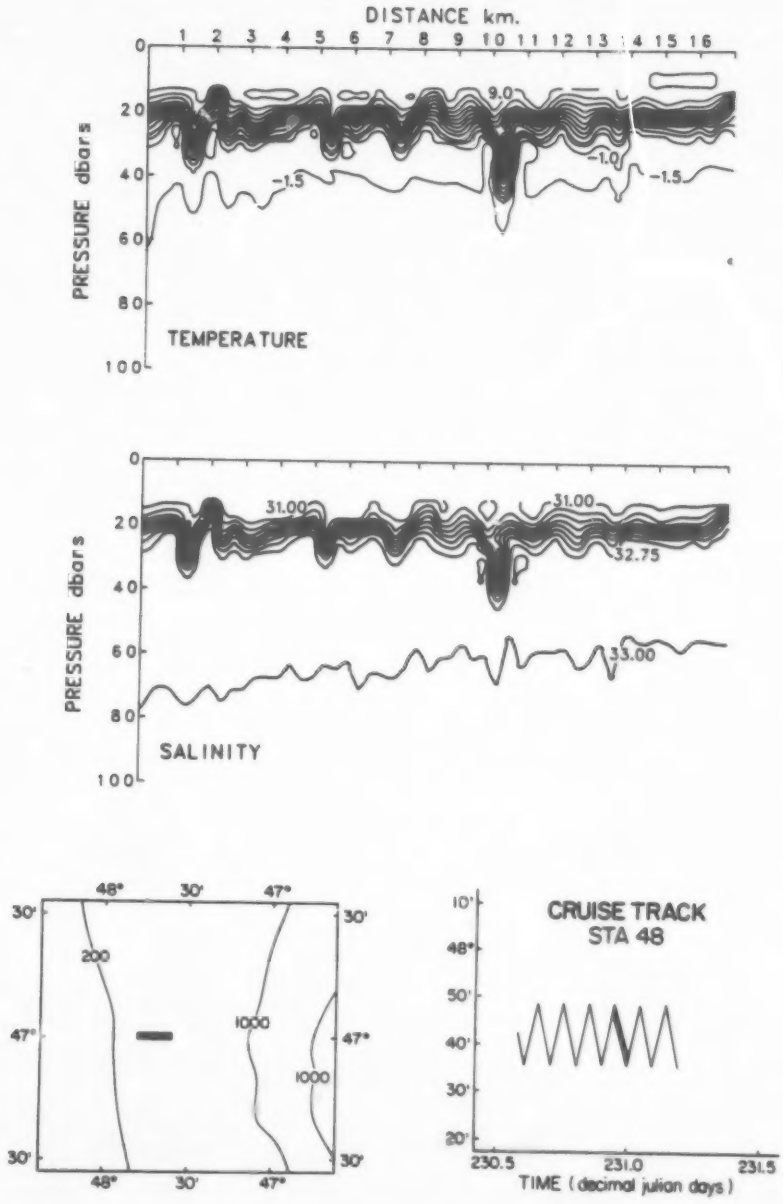

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
-1.5
TEMPERATURE
31.00
31.00
32.75
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 73

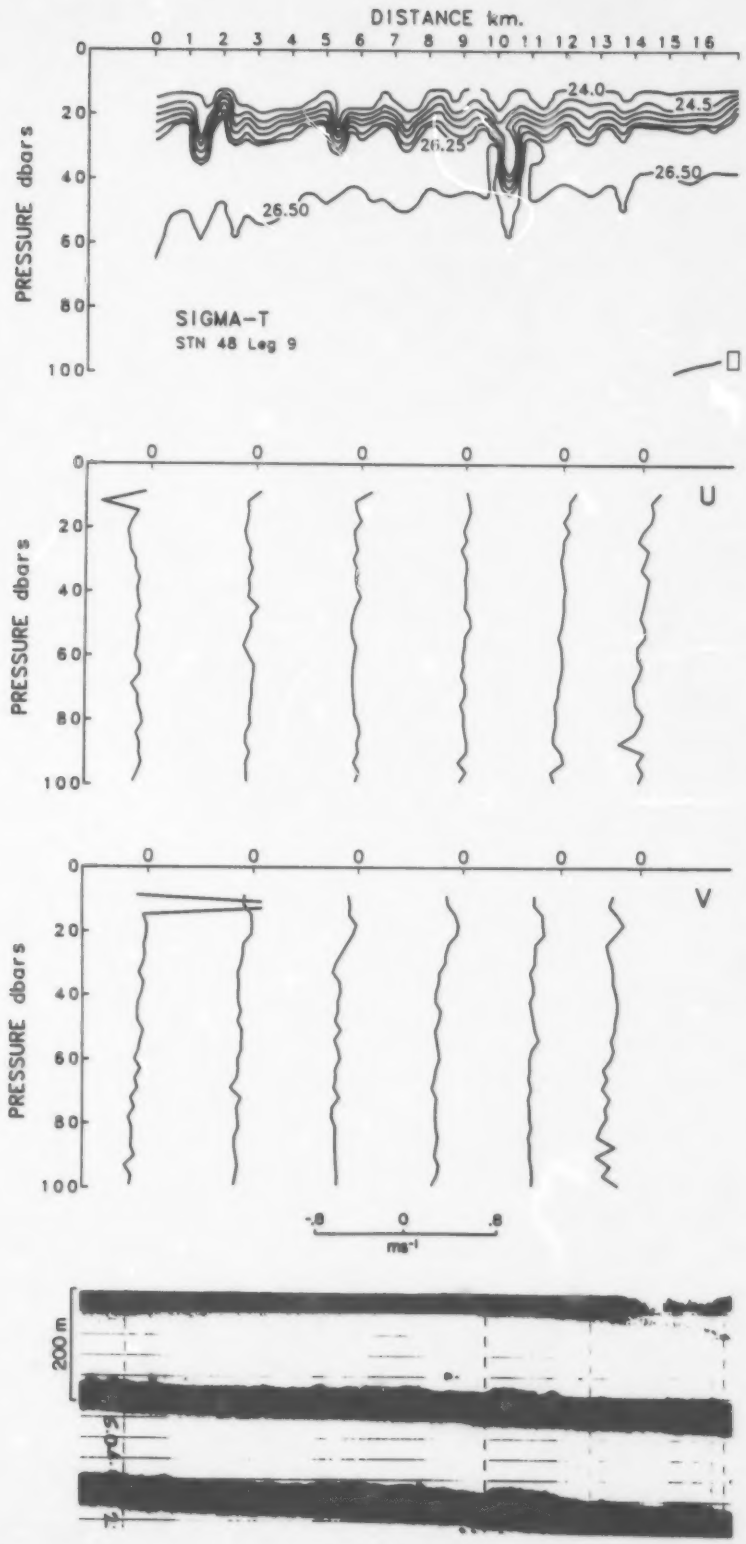

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
26.50
SIGMA-T
STN 48 Leg 9
U
V
-.8
0
.8
ms-1
200 m

Fig. 74

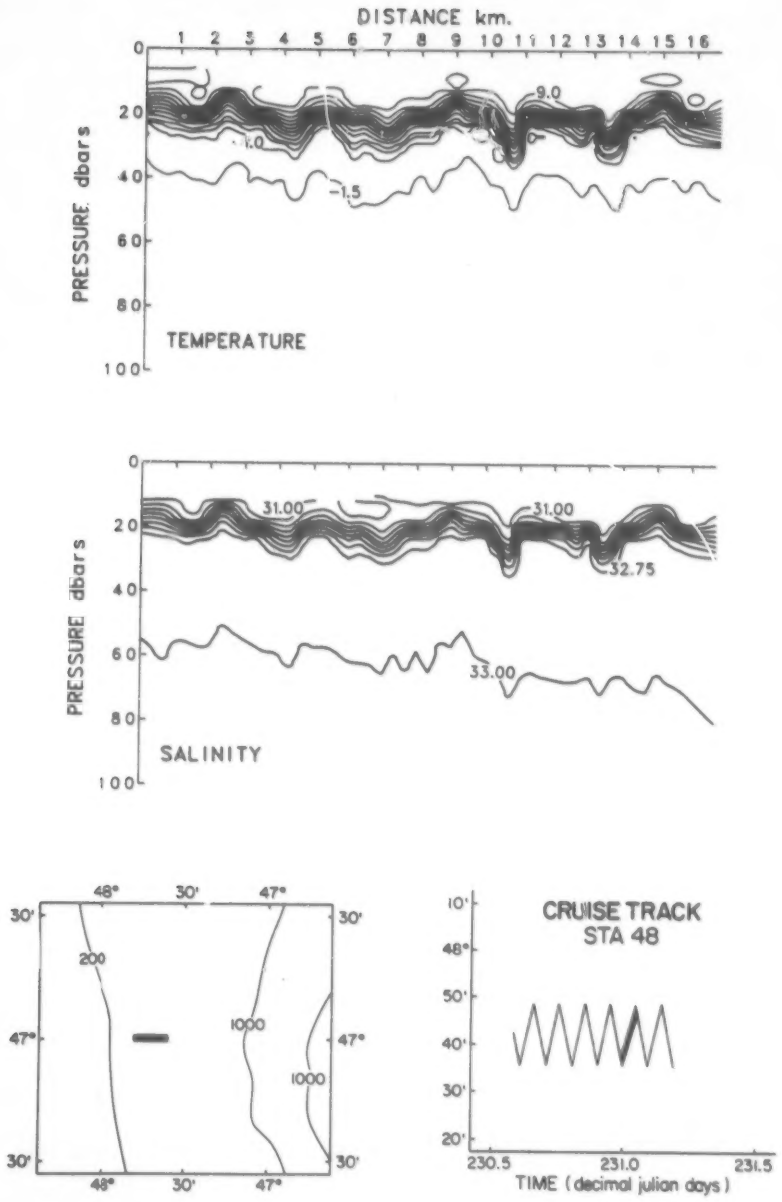

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
1.0
1.5
TEMPERATURE
31.00
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 75

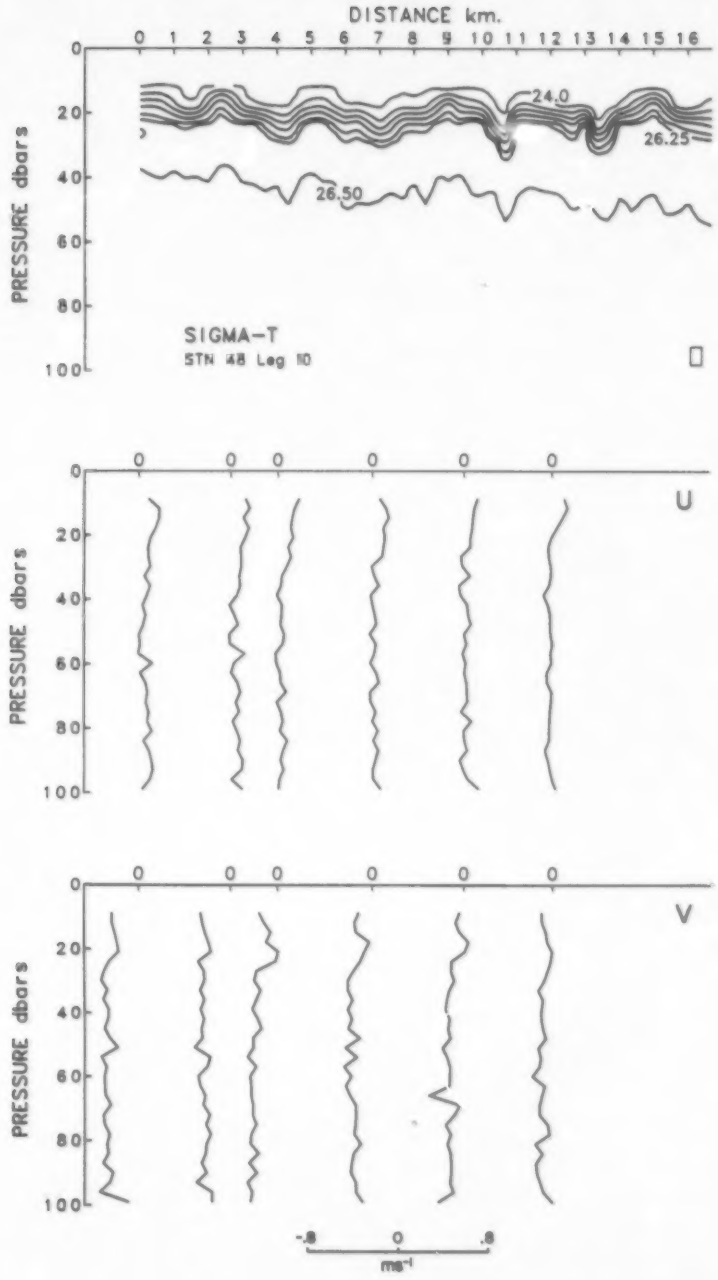

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 10
U
V
-.8
0
.8
ms⁻¹

Fig. 76

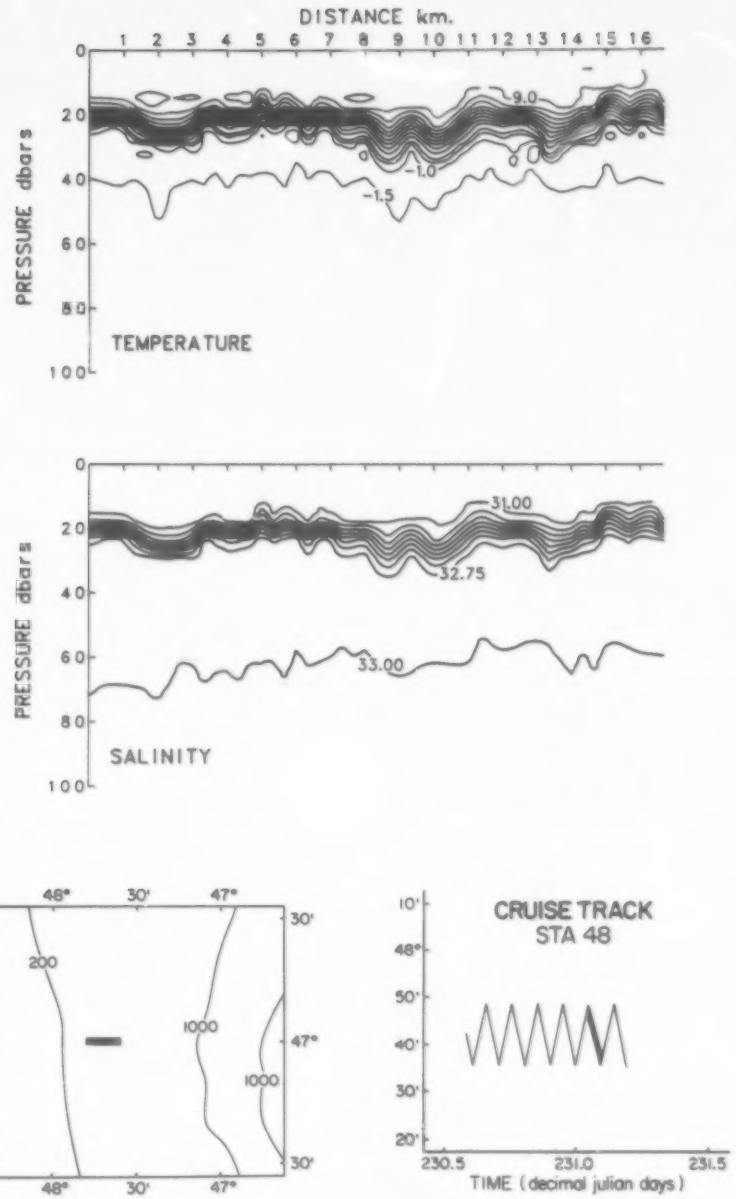

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 77

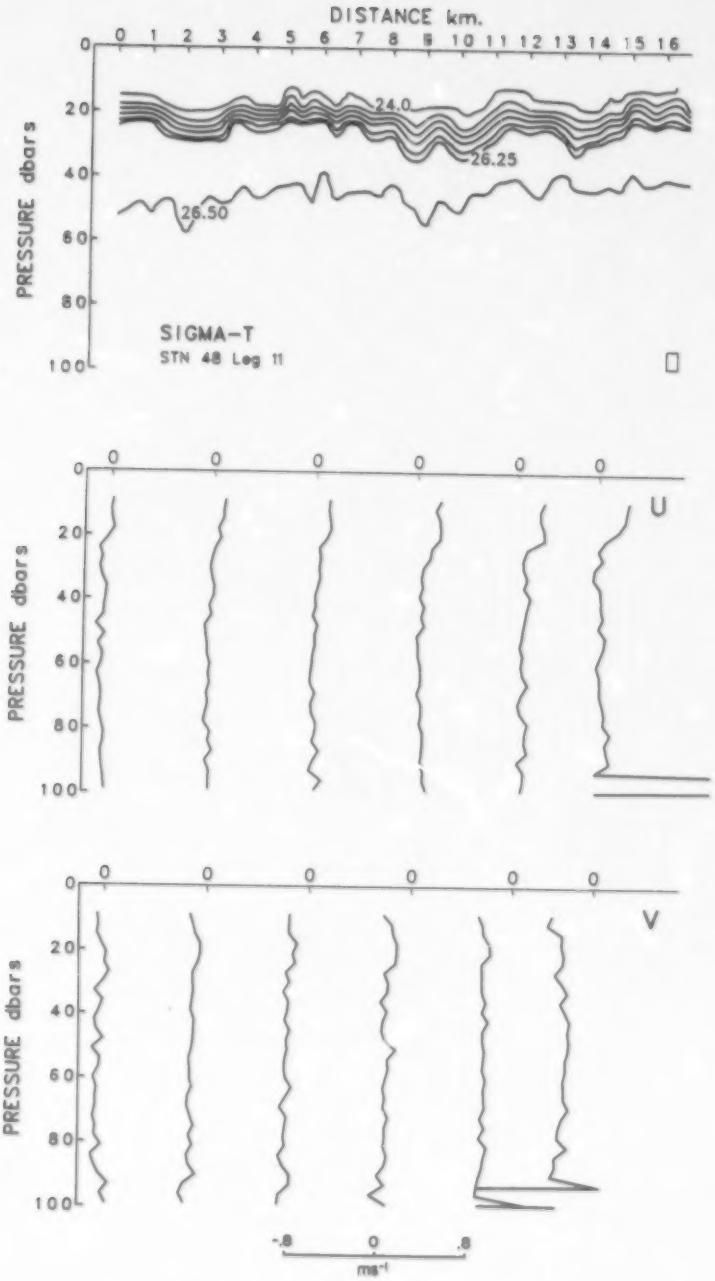

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 11
U
V
-.8
0
.8
ms⁻¹

Fig. 78

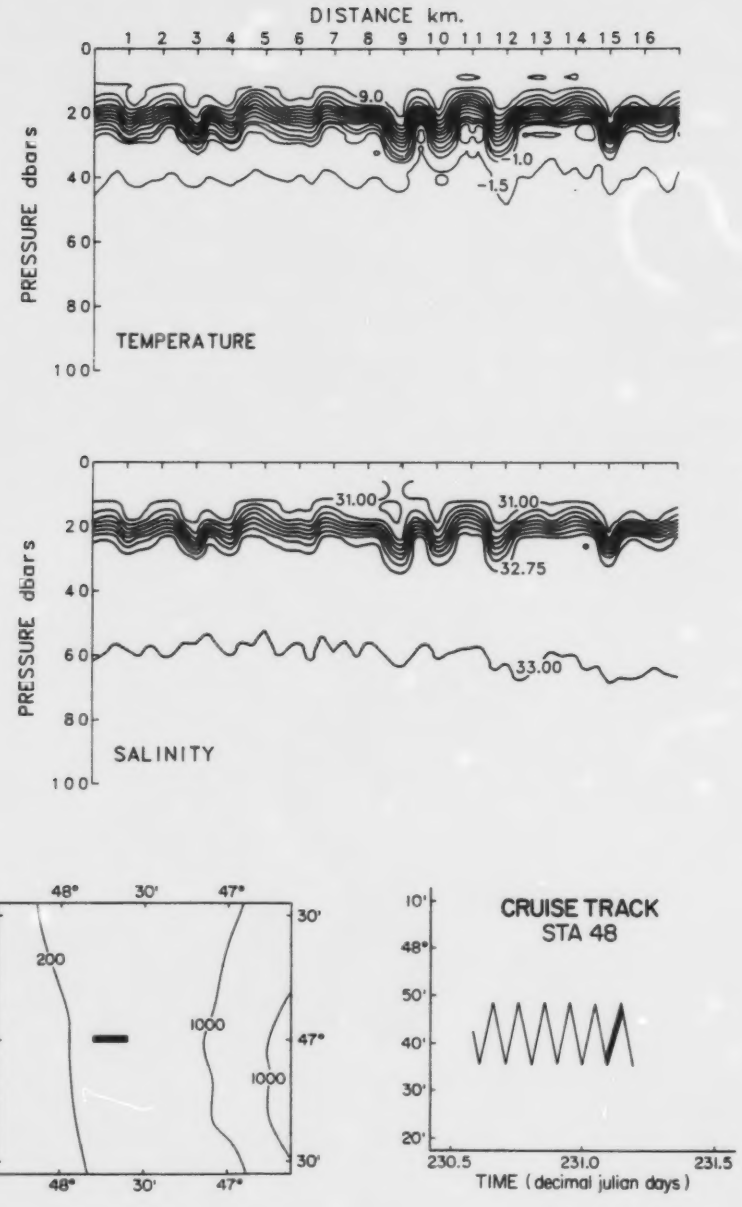

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.00
31.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 79

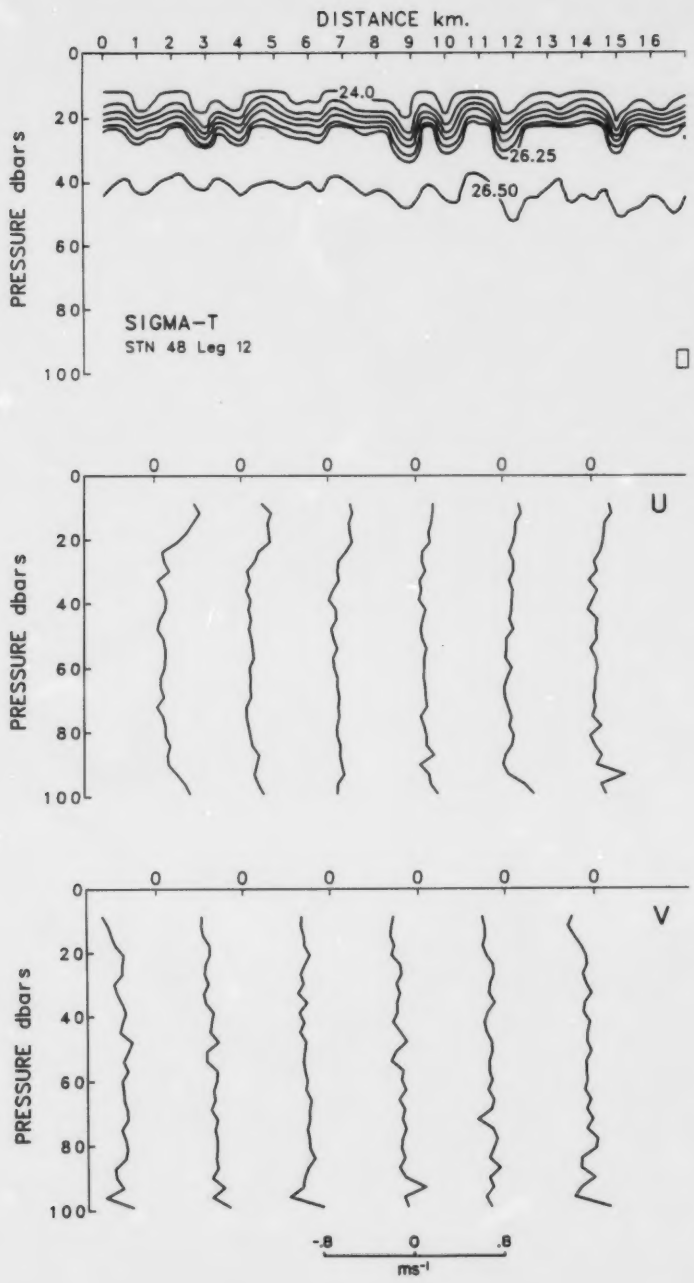
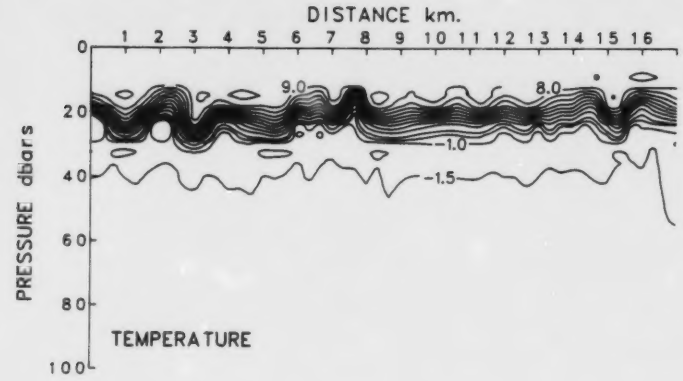
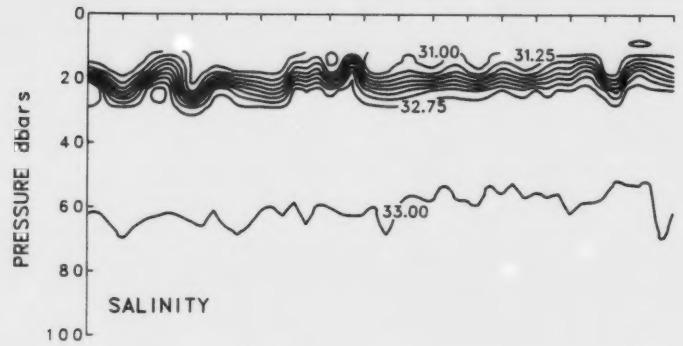
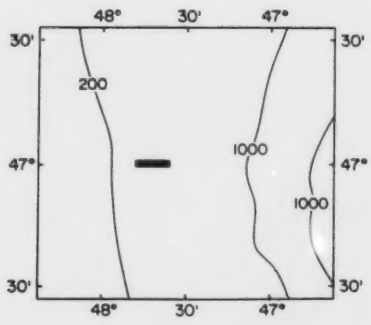

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
26.25
26.50
SIGMA-T
STN 48 Leg 12
U
V
-.8
0
.8
ms⁻¹

Fig. 80


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE


0
20
40
60
80
100
PRESSURE dbars
31.00
31.25
32.75
33.00
SALINITY


48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°

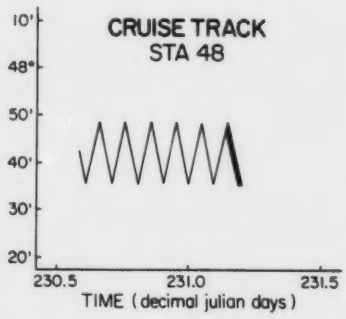

CRUISE TRACK
STA 48
10'
48°
50'
40'
30'
20'
230.5
231.0
231.5
TIME (decimal julian days)

Fig. 81

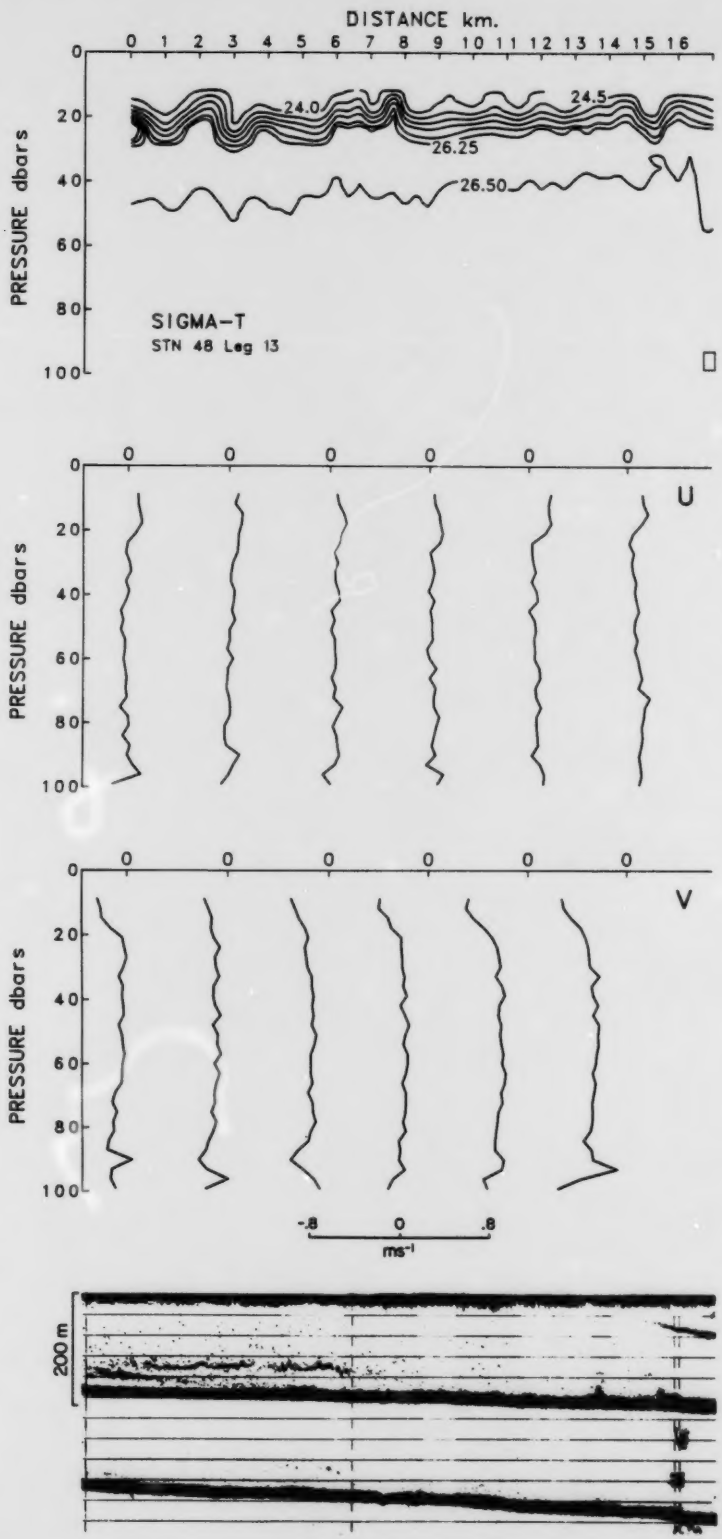

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.0
24.5
26.25
26.50
SIGMA-T
STN 48 Leg 13
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 82

Figures 83-112

BATFISH station 49; 15 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP (Acoustic Doppler Current Profiler), location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. The relative spacing of the U and V profiles reflects their relative position in the section. The null line of the first U and V profile is aligned vertically with the origin of the Sigma-t section.

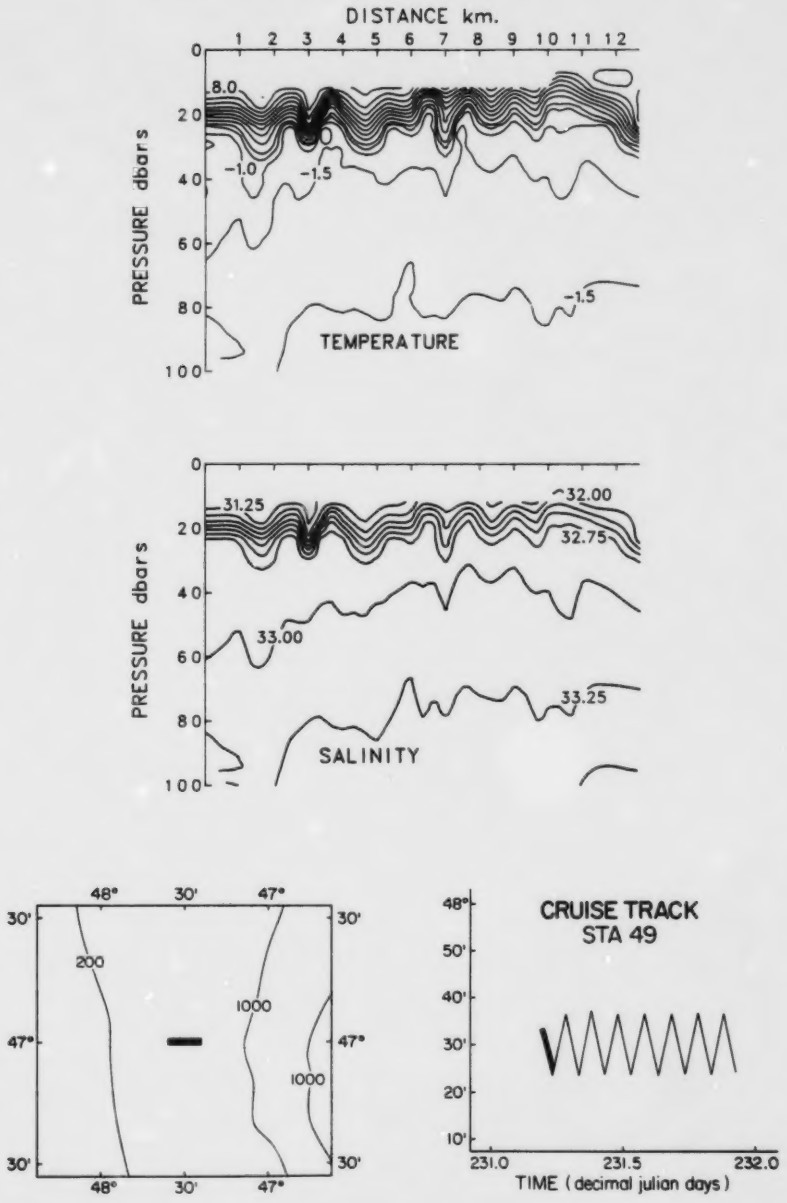

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12
0
20
40
60
80
100
PRESSURE dbars
8.0
-1.0
-1.5
-1.5
TEMPERATURE
31.25
32.00
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 83

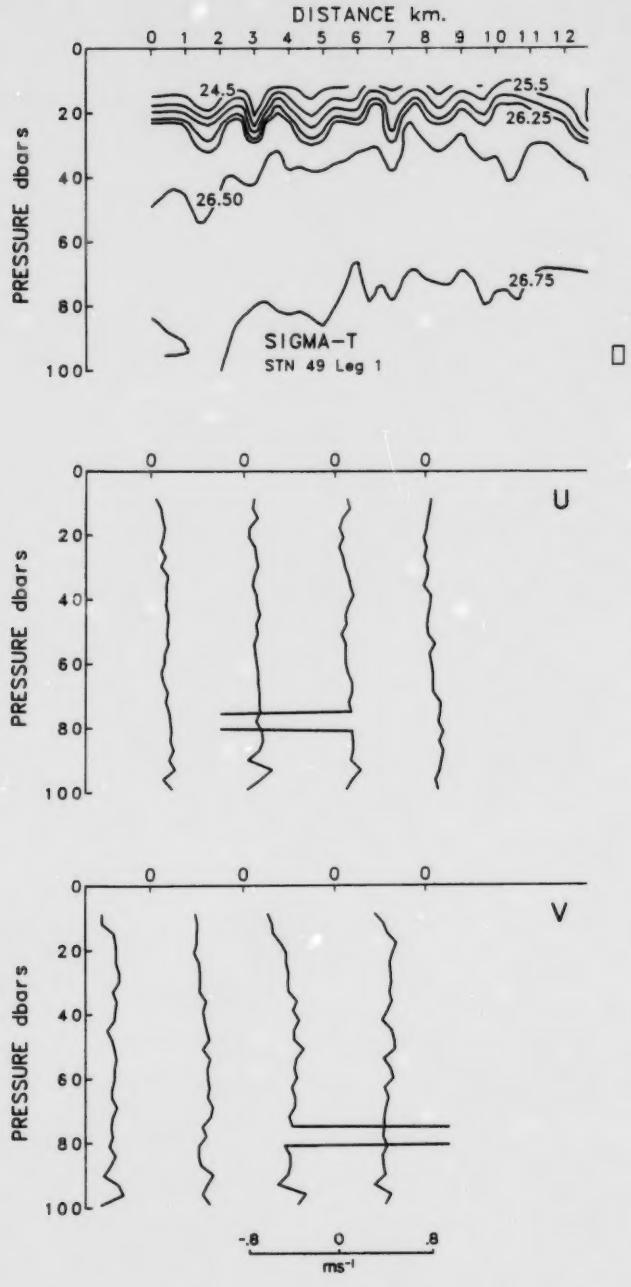
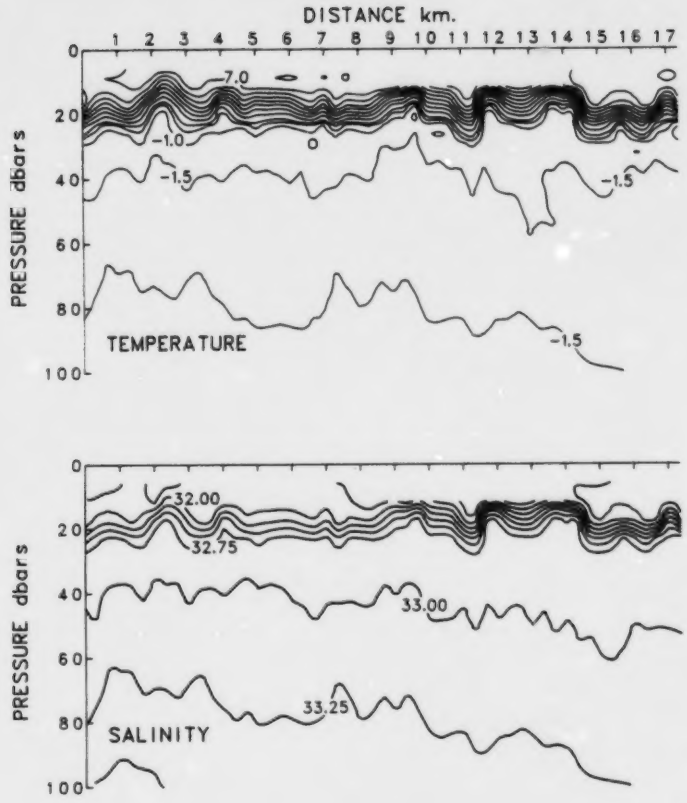

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12
PRESSURE dbars
0
20
40
60
80
100
24.5
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 1
U
V
-.8
0
.8
ms⁻¹

Fig. 84


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
7.0
-1.0
-1.5
-1.5
TEMPERATURE
-1.5
32.00
32.75
33.00
33.25
SALINITY

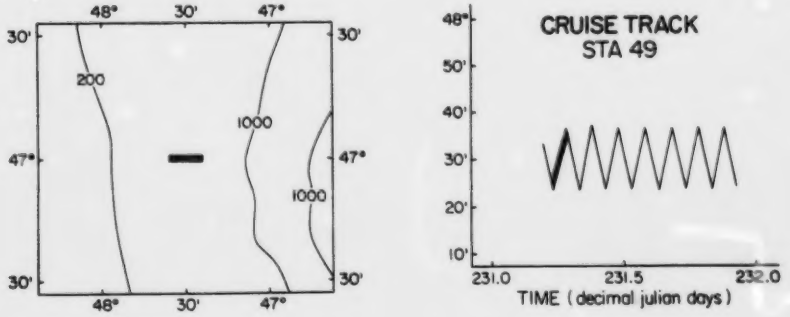

48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 85

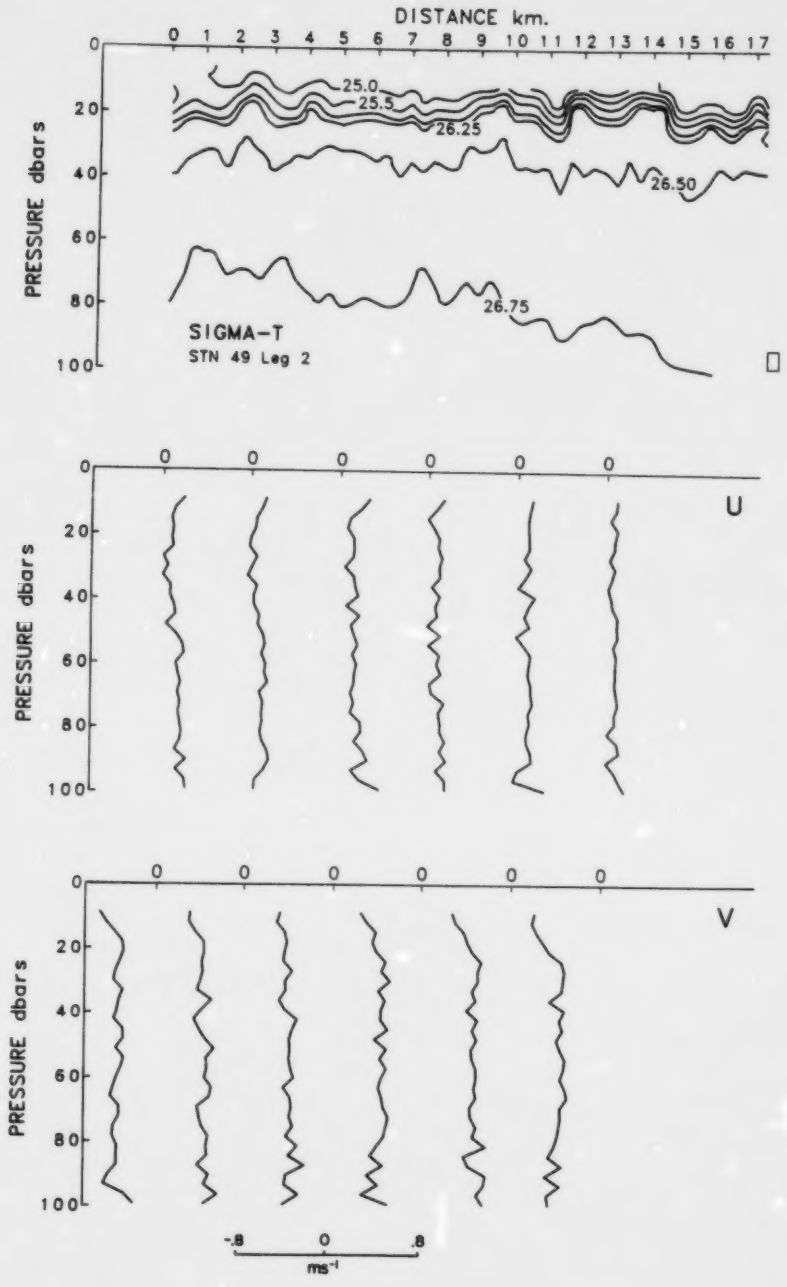

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 2
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 86

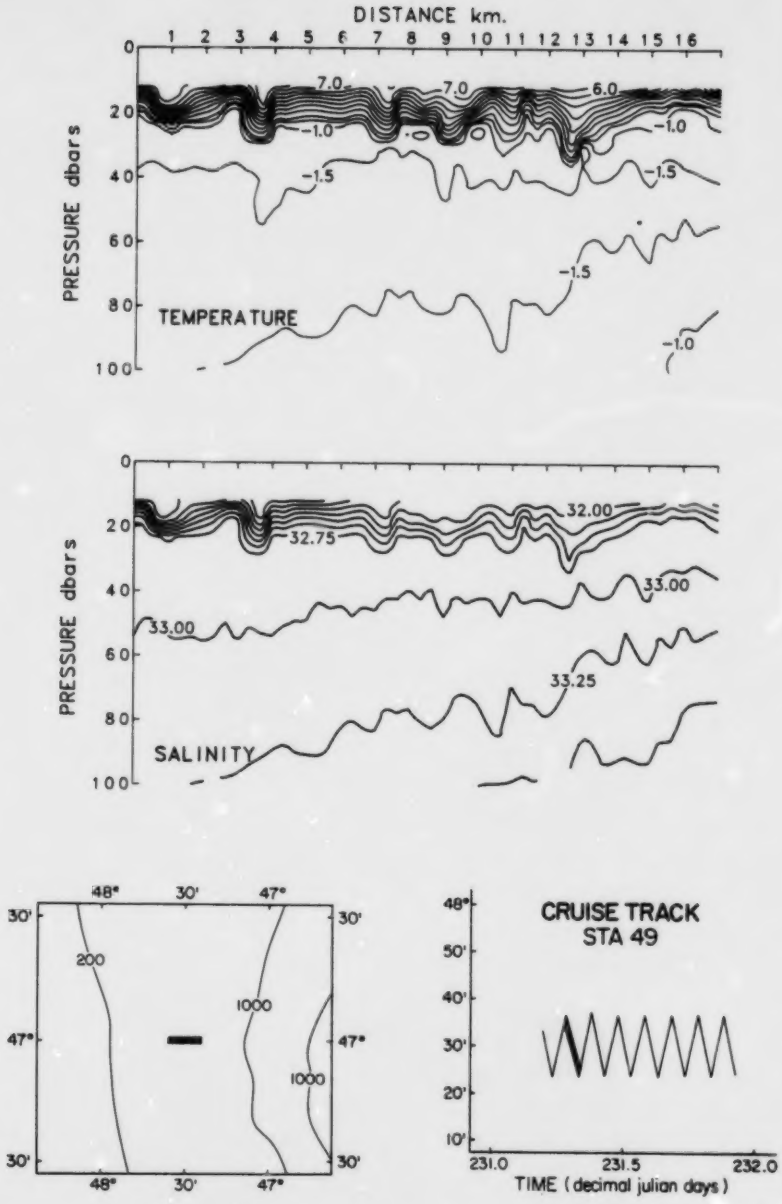

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
7.0
6.0
-1.0
-1.0
-1.5
-1.5
-1.5
-1.0
TEMPERATURE
32.00
32.75
33.00
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 87

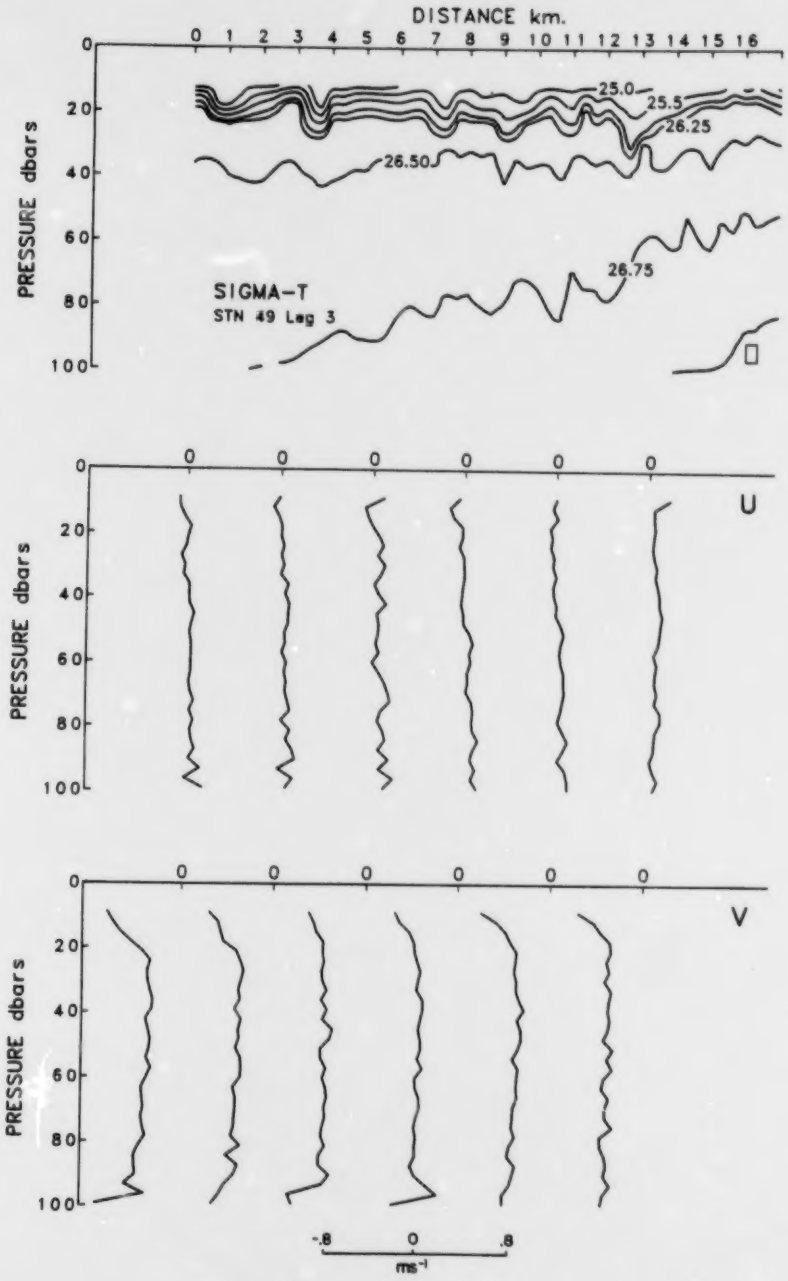

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Lag 3
U
V
-.8
0
.8
ms⁻¹

Fig. 88

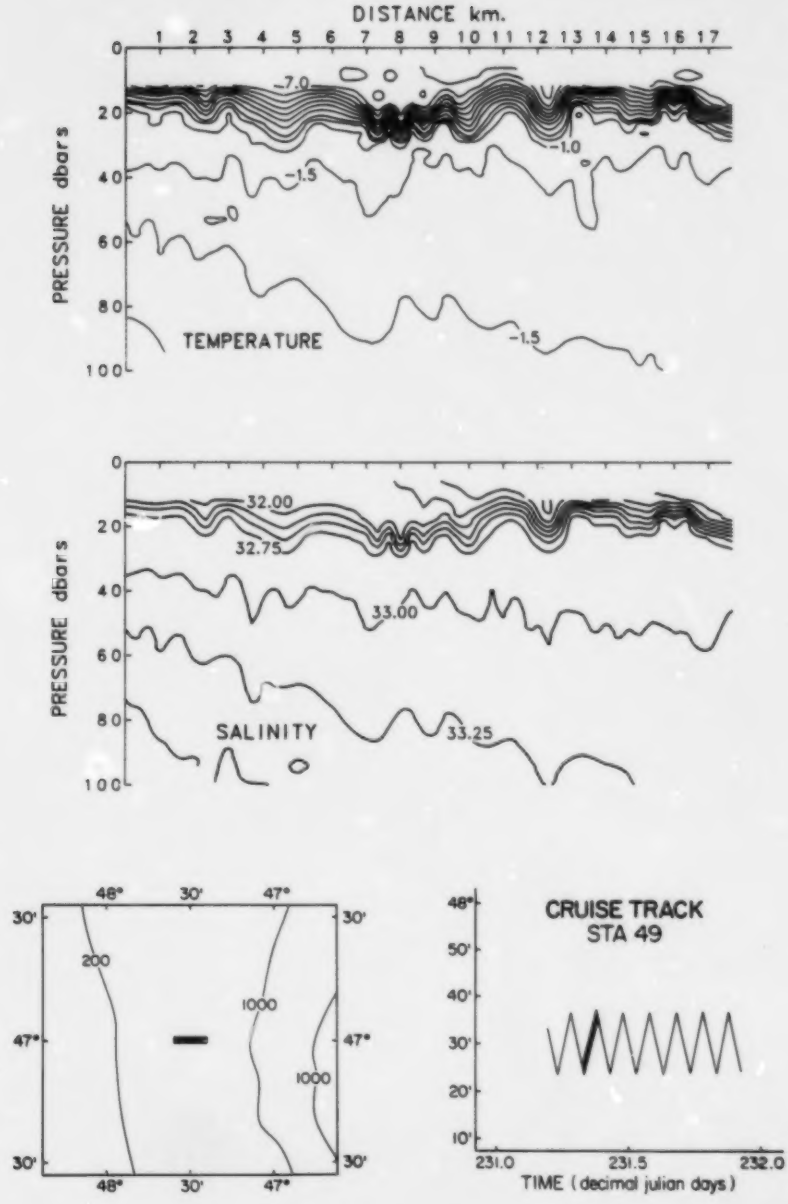

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
-7.0
-1.0
-1.5
0
-1.5
TEMPERATURE
32.00
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 89

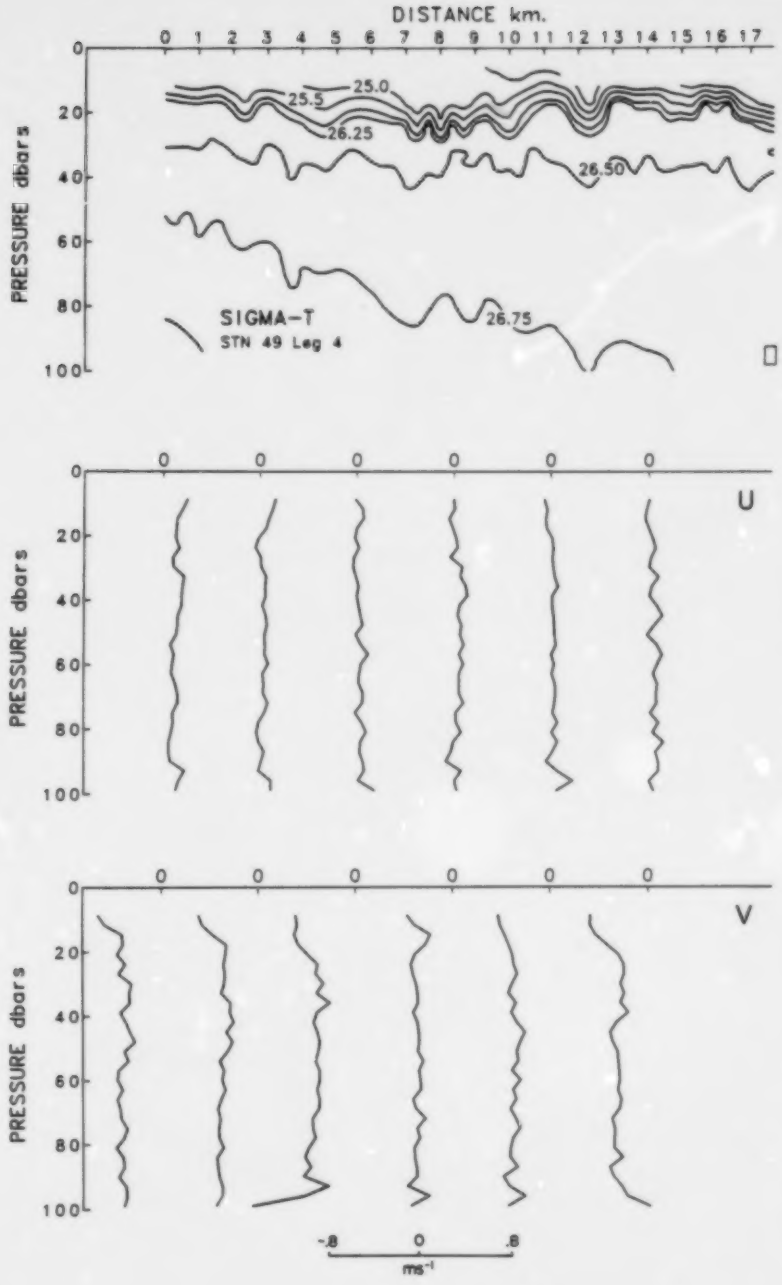

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 4
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 90

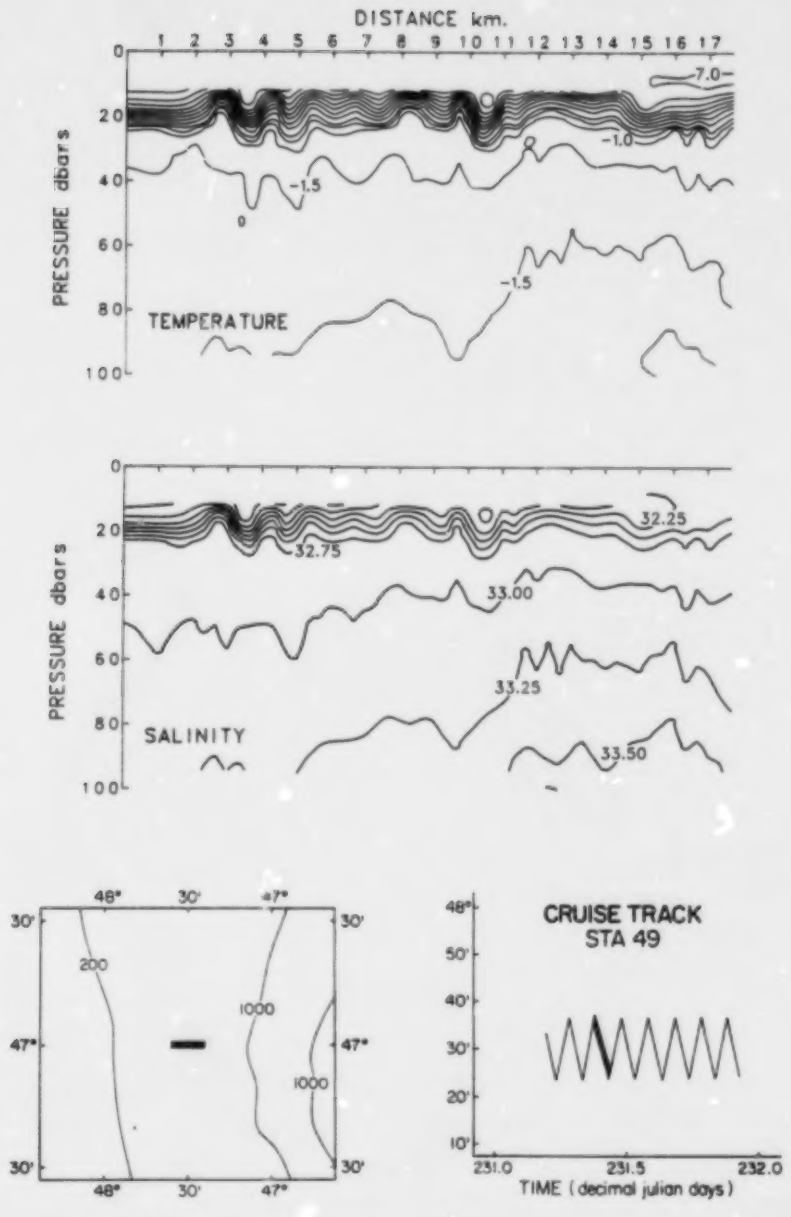

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
-7.0
-1.0
-1.5
0
-1.5
TEMPERATURE
32.25
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 91

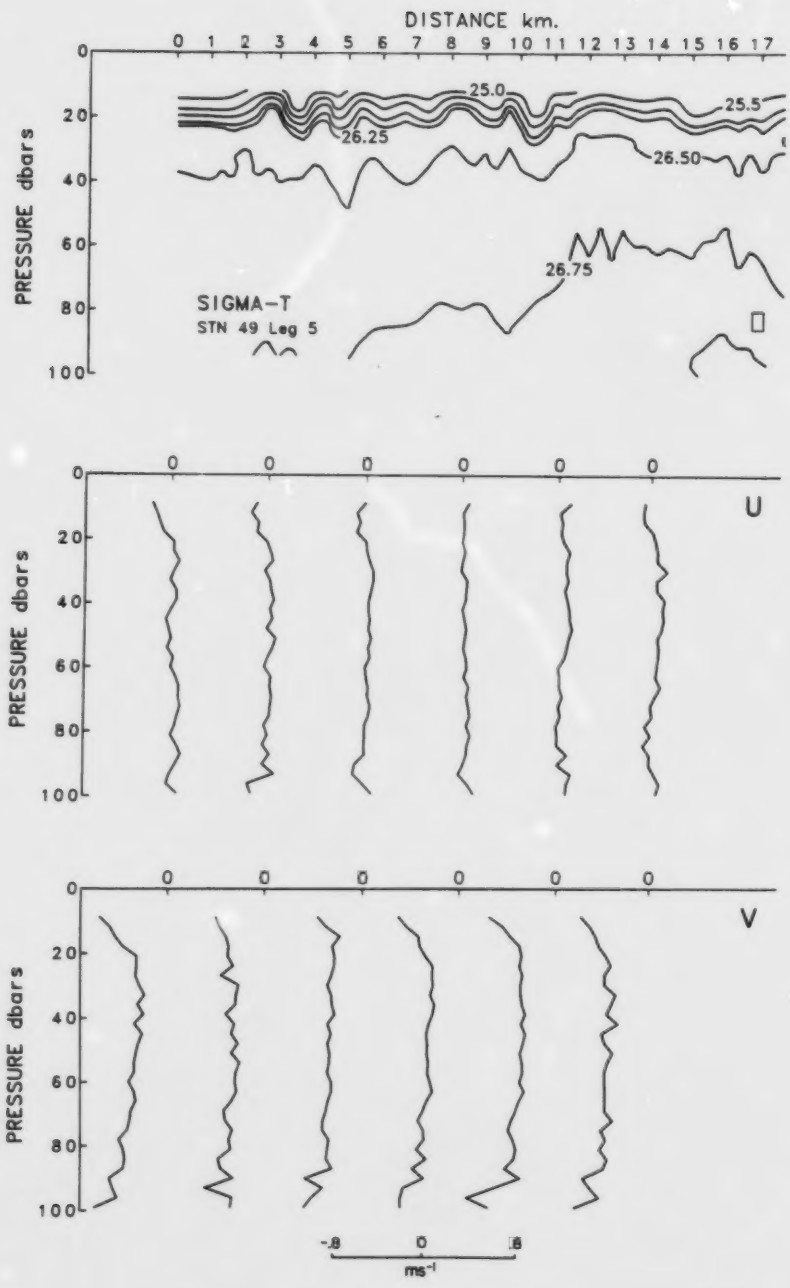

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 5
U
V
-.8
0
.8
ms⁻¹

Fig. 92

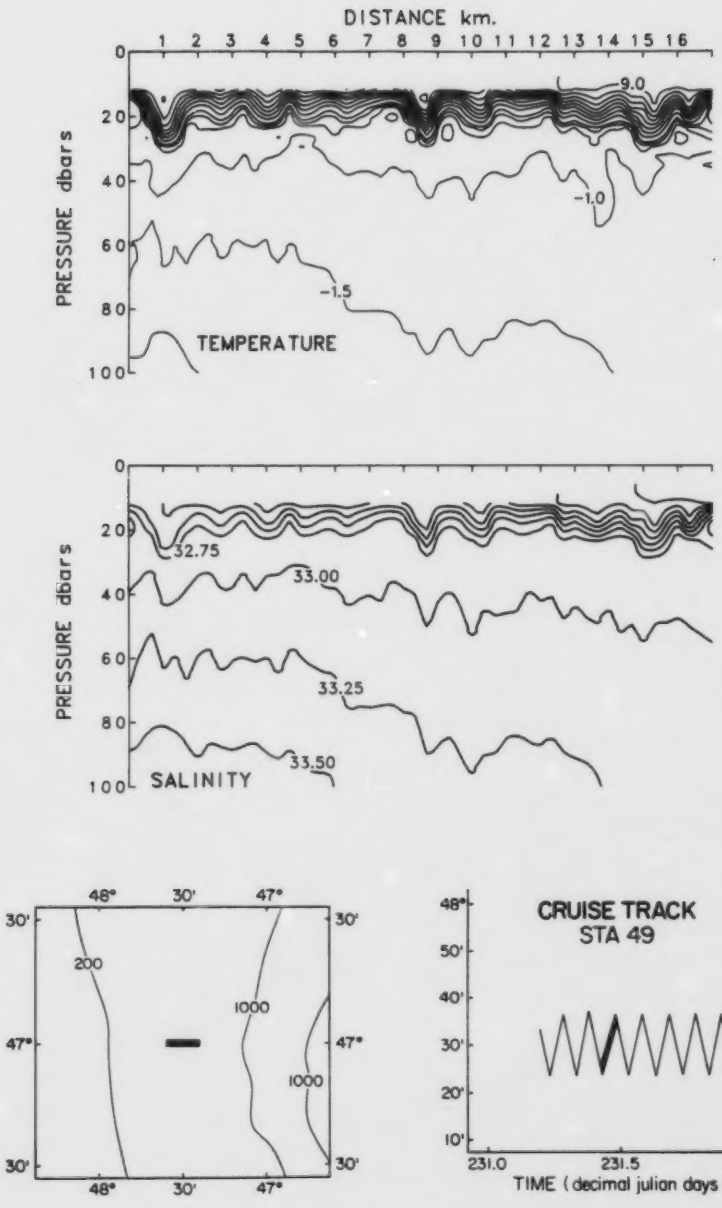

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
9.0
-1.0
-1.5
TEMPERATURE
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 93

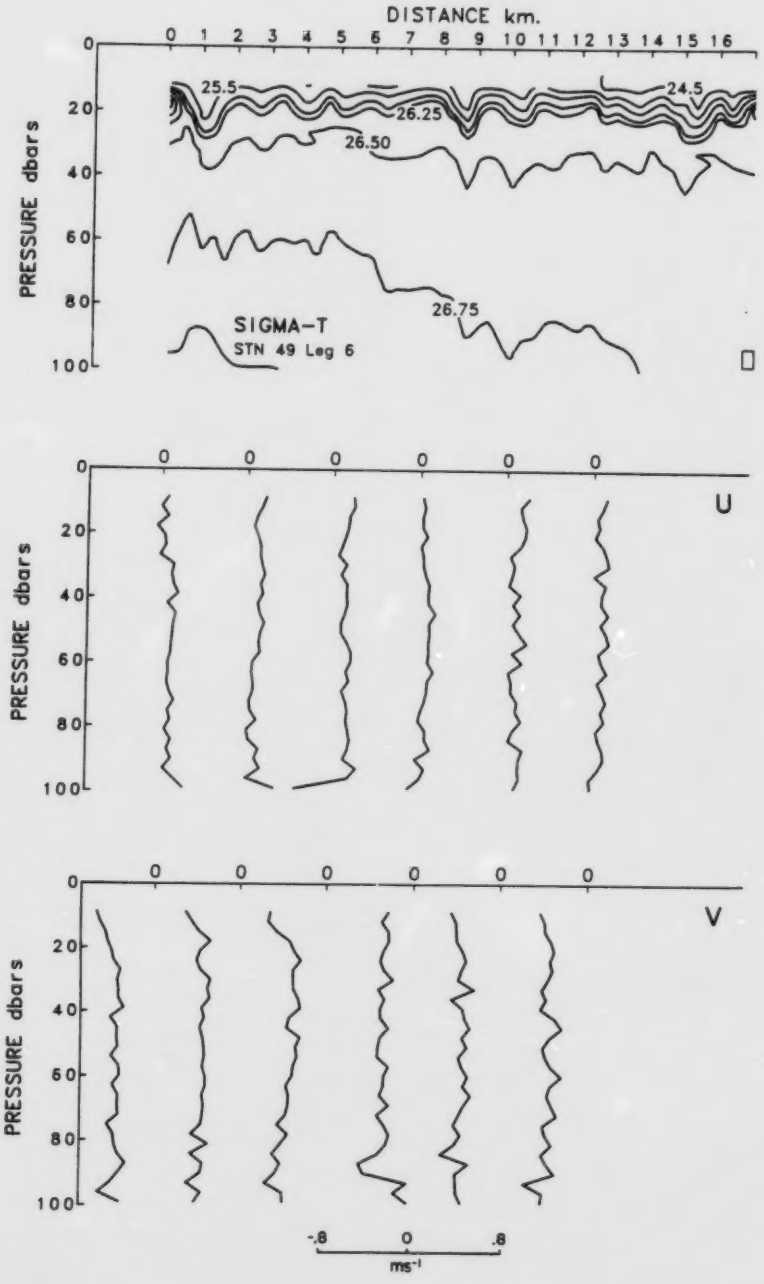

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.25
26.50
24.5
26.75
SIGMA-T
STN 49 Leg 6
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 94

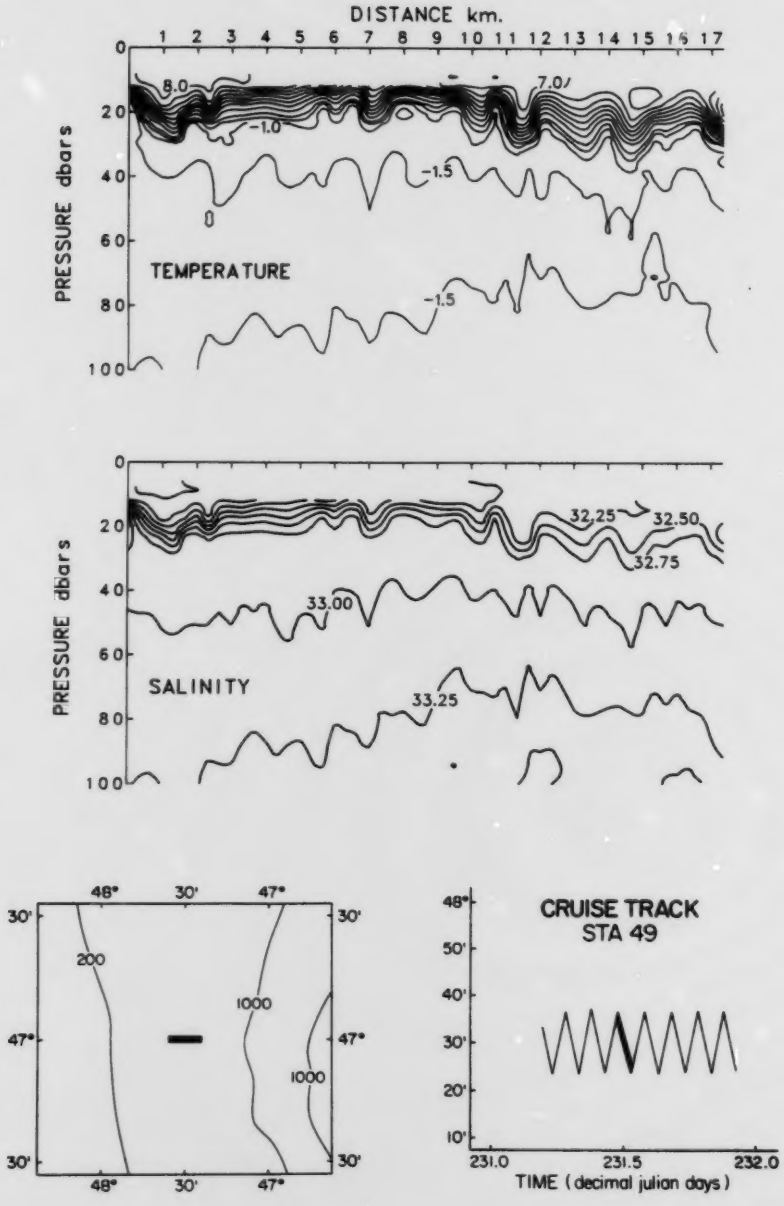

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.5
0
TEMPERATURE
-1.5
32.25
32.50
32.75
33.00
SALINITY
33.25
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
30'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 95

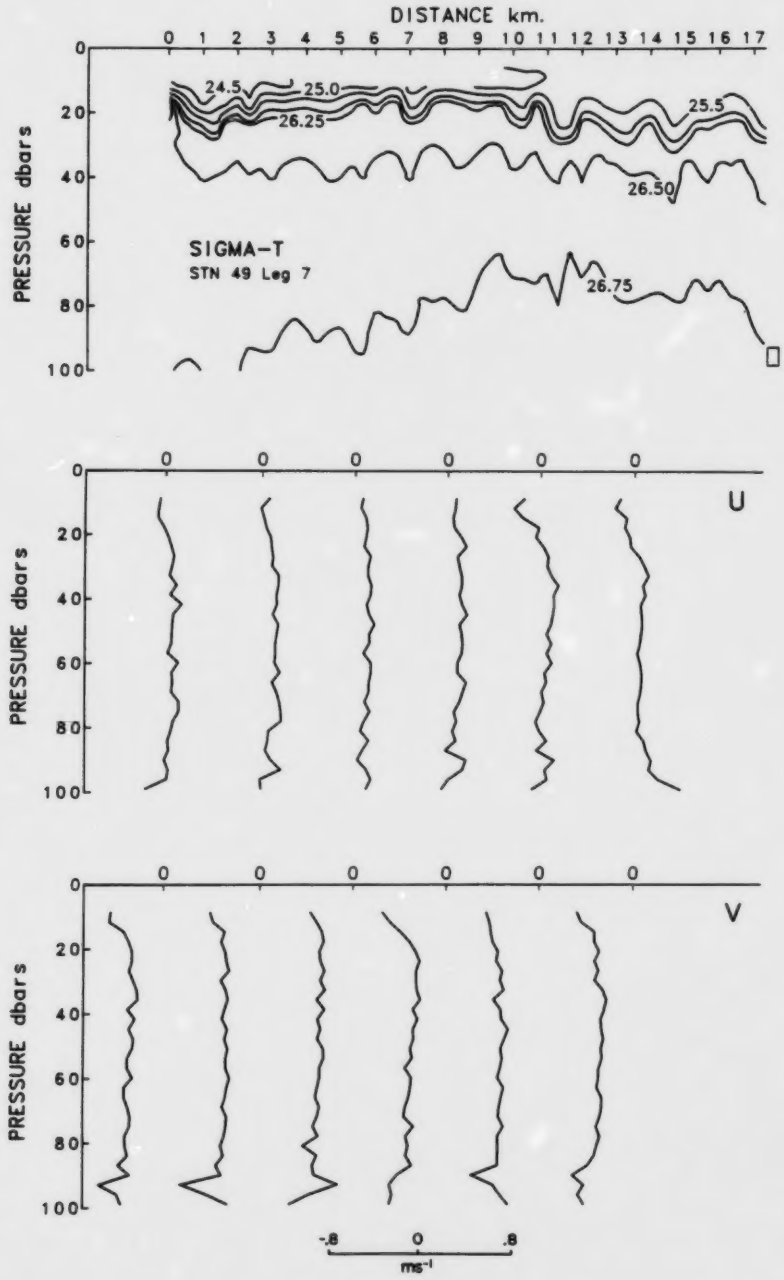

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.5
25.0
26.25
25.5
26.50
SIGMA-T
STN 49 Leg 7
26.75
U
V
-.8
0
.8
ms⁻¹

Fig. 96

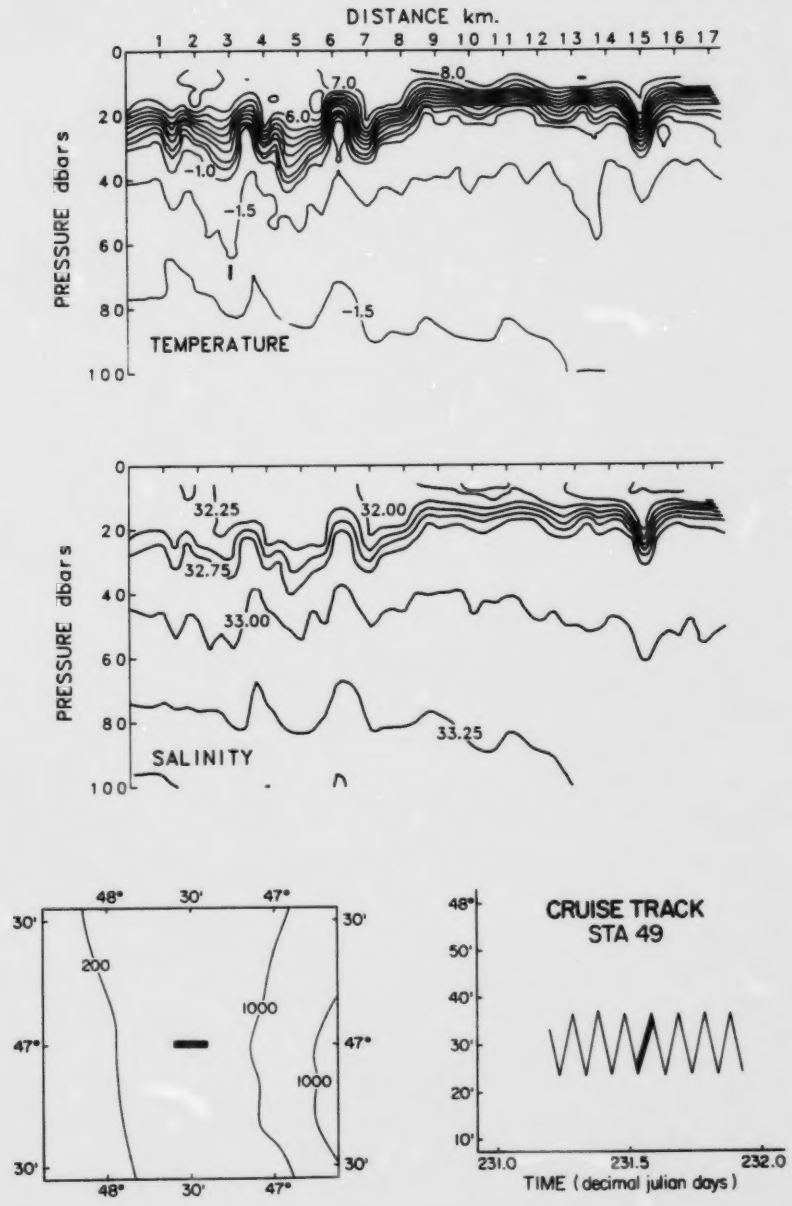

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
7.0
8.0
6.0
-1.0
-1.5
-1.5
TEMPERATURE
32.25
32.00
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 97

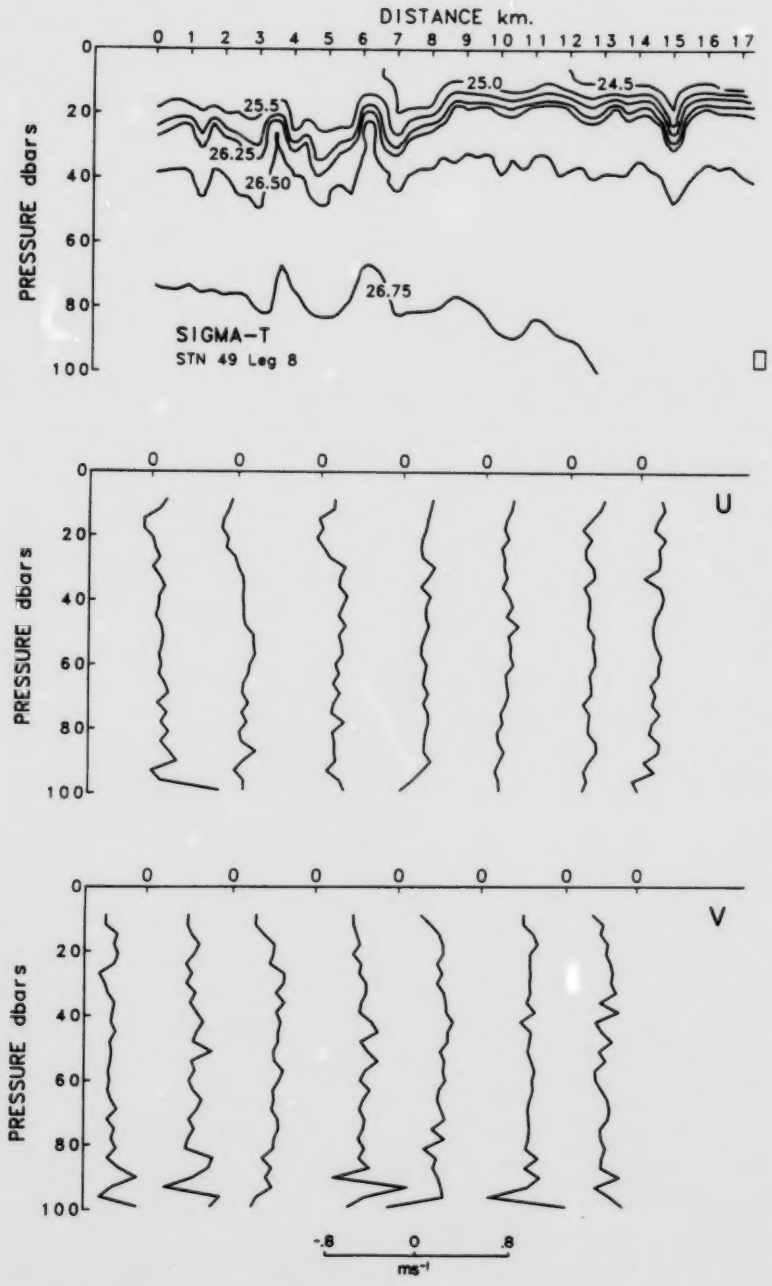

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
25.0
24.5
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 8
U
V
-.8
0
.8
ms⁻¹

Fig. 98

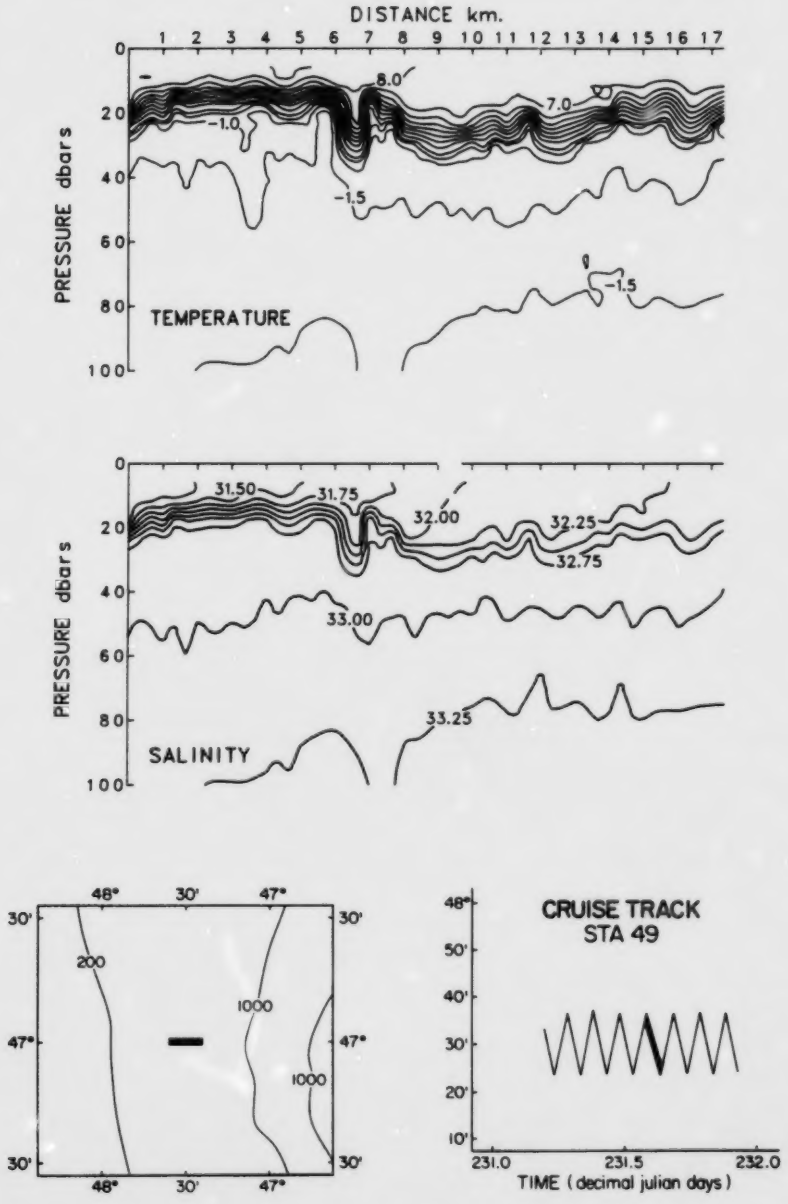

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
8.0
7.0
-1.0
-1.5
-1.5
TEMPERATURE
31.50
31.75
32.00
32.25
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 99

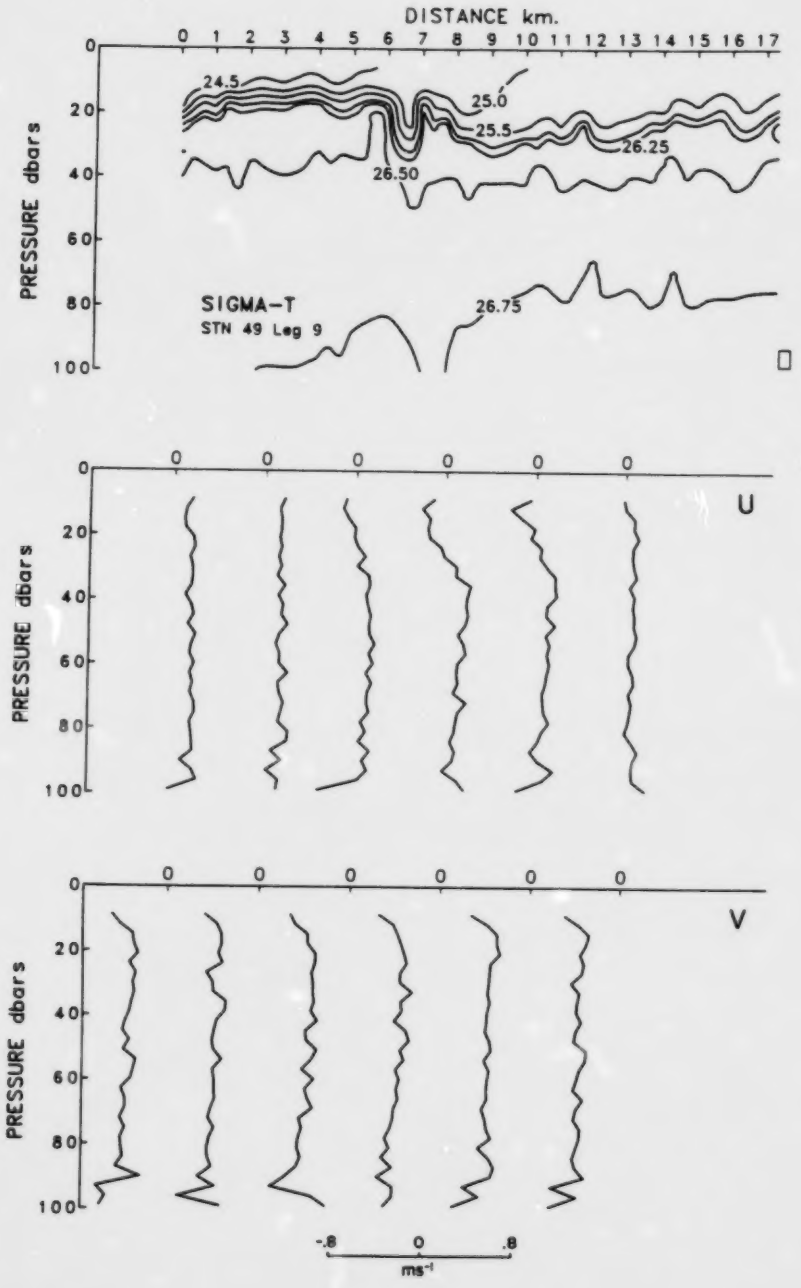

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
24.5
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 9
U
V
-.8
0
.8
ms⁻¹

Fig. 100

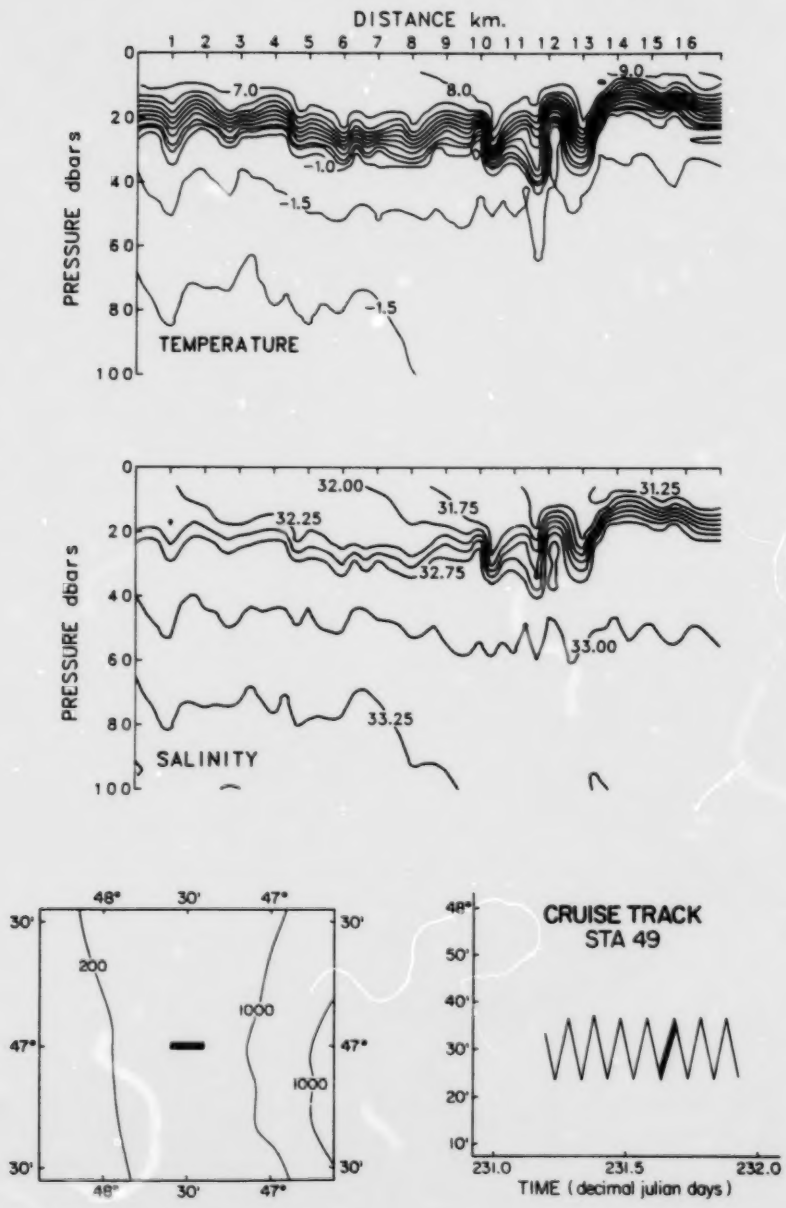

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
8.0
9.0
-1.0
-1.5
-1.5
TEMPERATURE
32.00
31.75
31.25
32.25
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
30'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 101

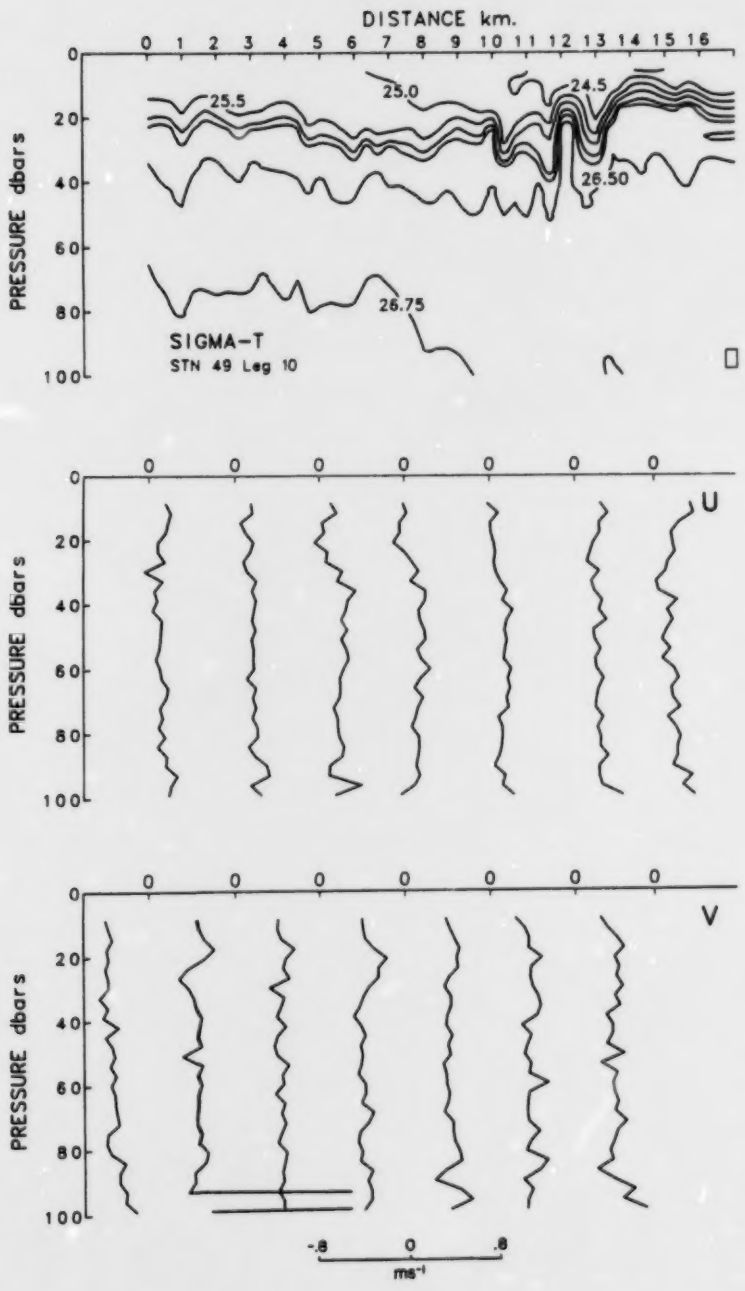

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
25.0
24.5
26.50
26.75
SIGMA-T
STN 49 Leg 10
U
V
-.8
0
.8
ms⁻¹

Fig. 102

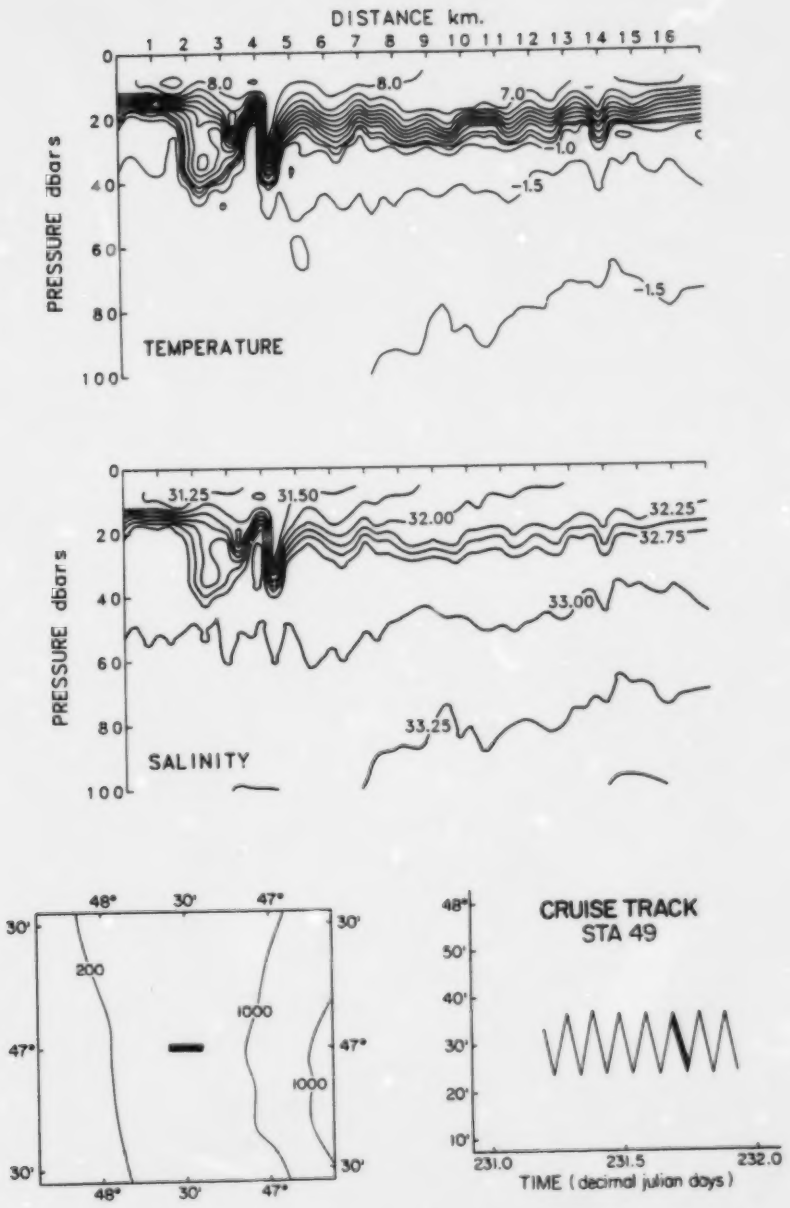

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
8.0
8.0
7.0
-1.0
-1.5
-1.5
TEMPERATURE
31.25
31.50
32.00
32.25
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 103

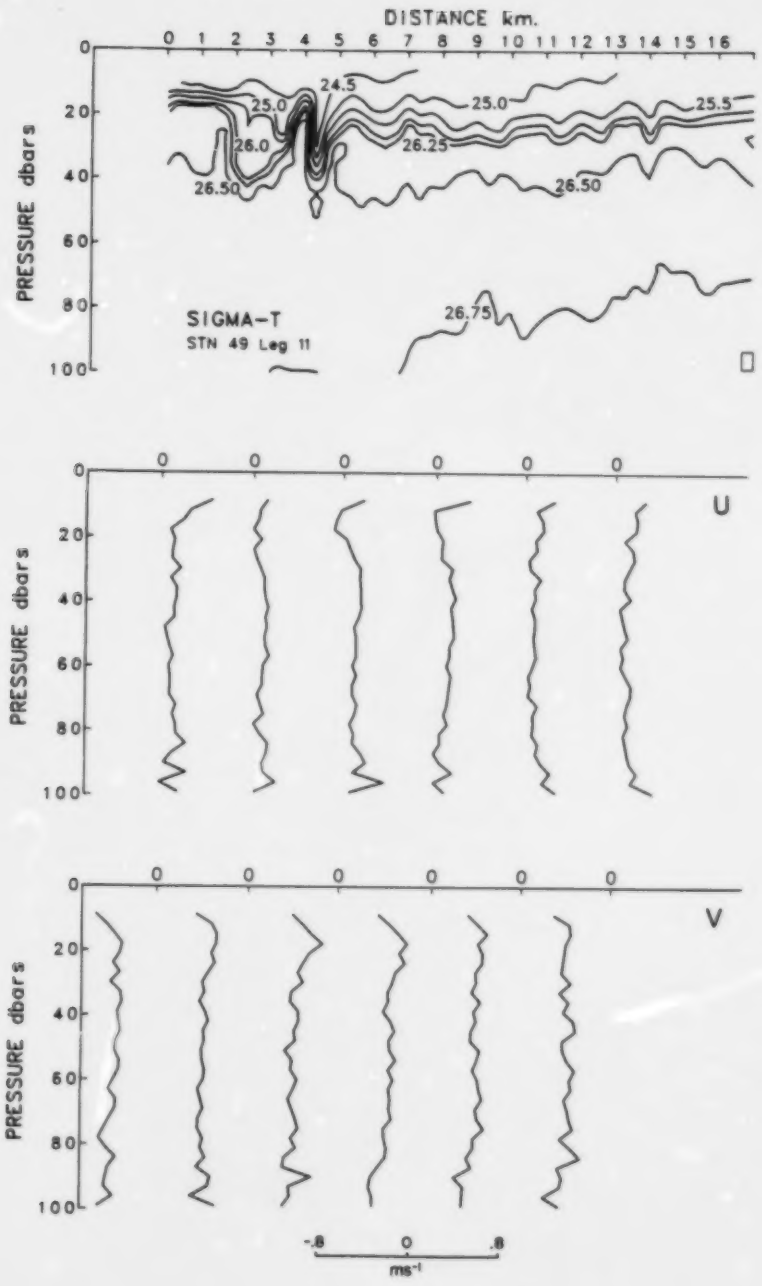

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.5
25.0
25.0
25.5
26.0
26.25
26.50
26.50
SIGMA-T
STN 49 Leg 11
26.75
U
V
-.8
0
.8
ms-1

Fig. 104

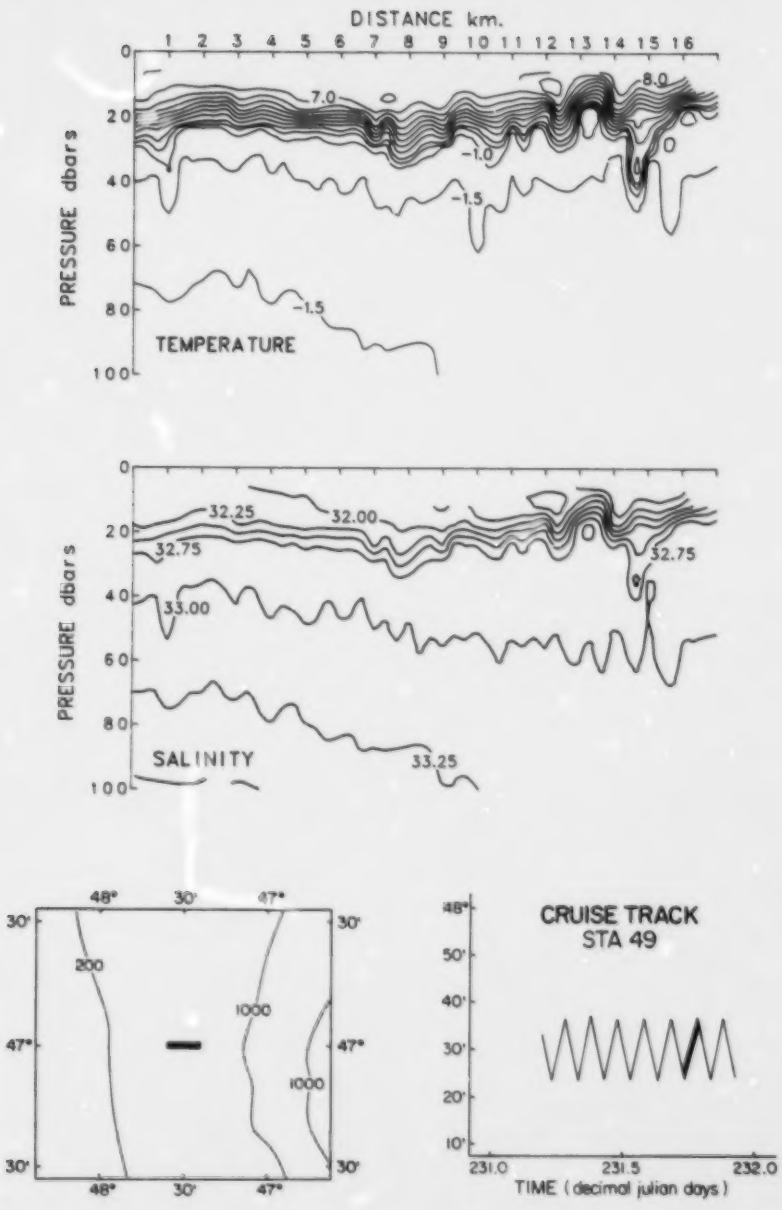

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
7.0
8.0
-1.0
-1.5
-1.5
TEMPERATURE
32.25
32.00
32.75
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
30'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 105

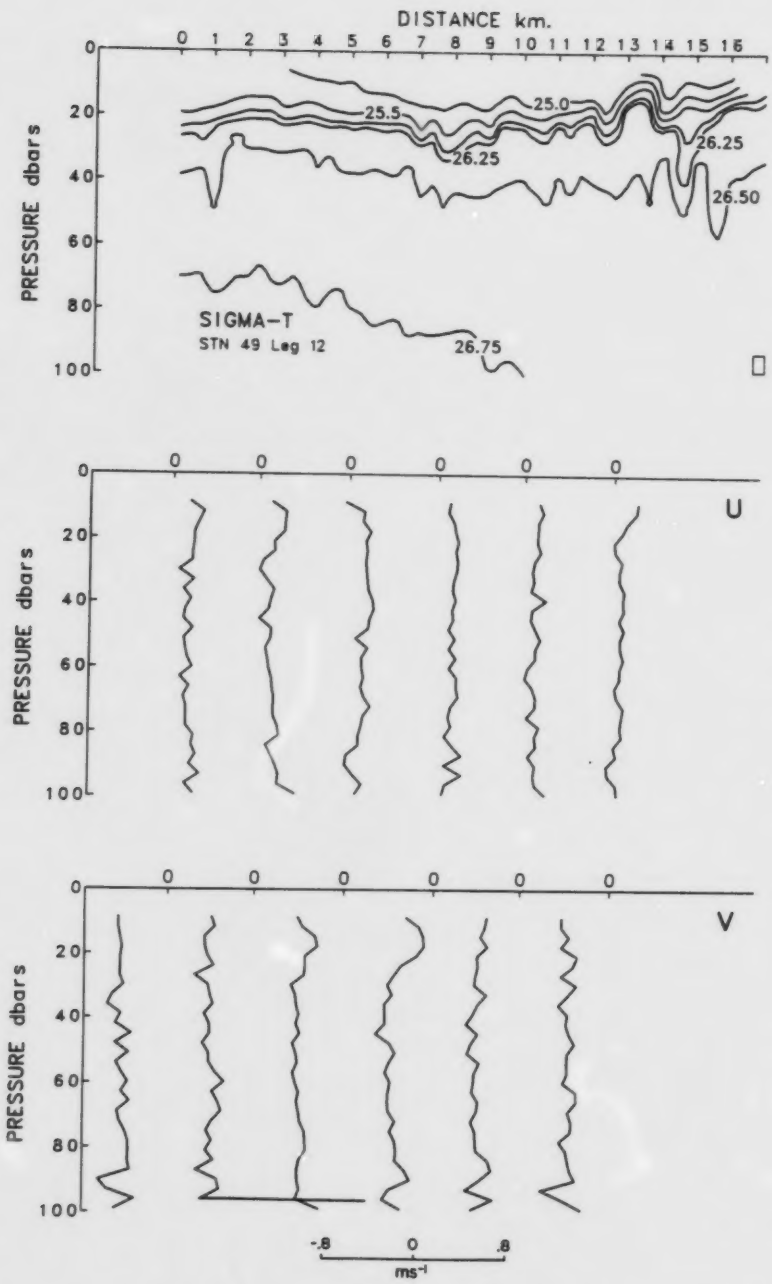

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
25.0
26.25
26.25
26.50
SIGMA-T
STN 49 Leg 12
26.75
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 106

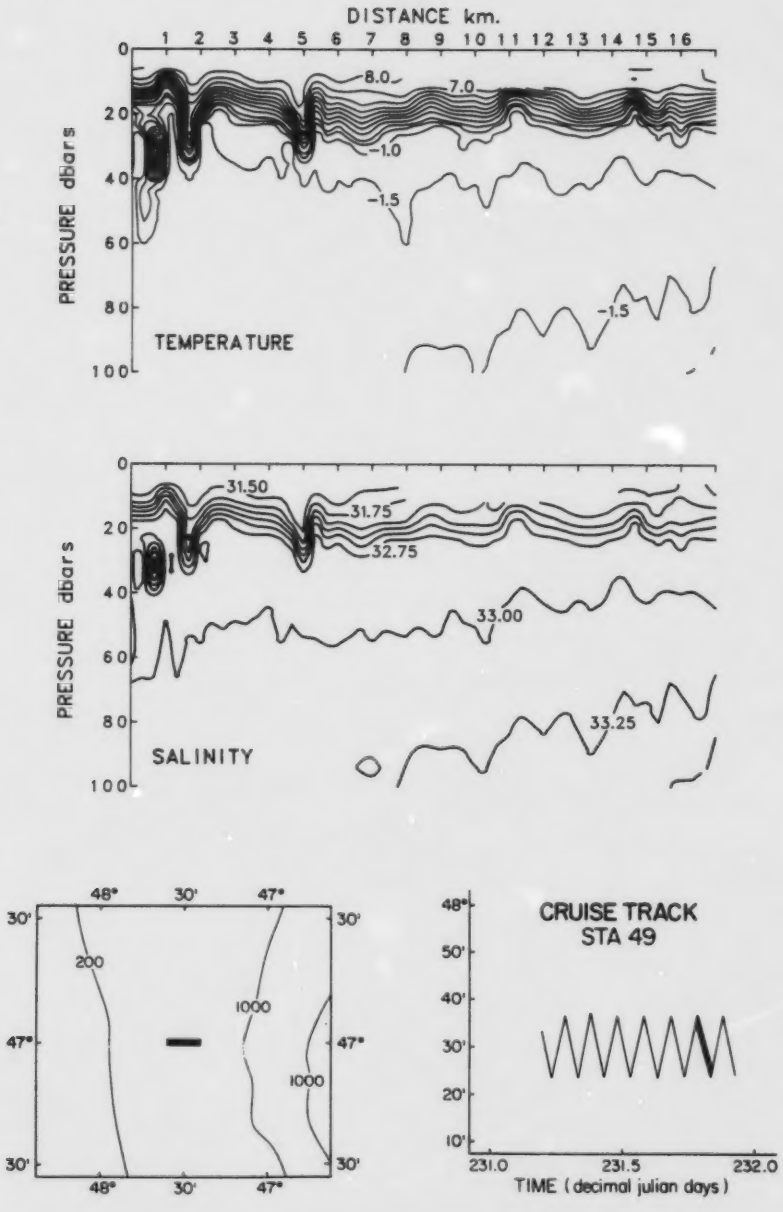

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
8.0
7.0
-1.0
-1.5
-1.5
TEMPERATURE
31.50
31.75
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
48°
50'
40'
30'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 107

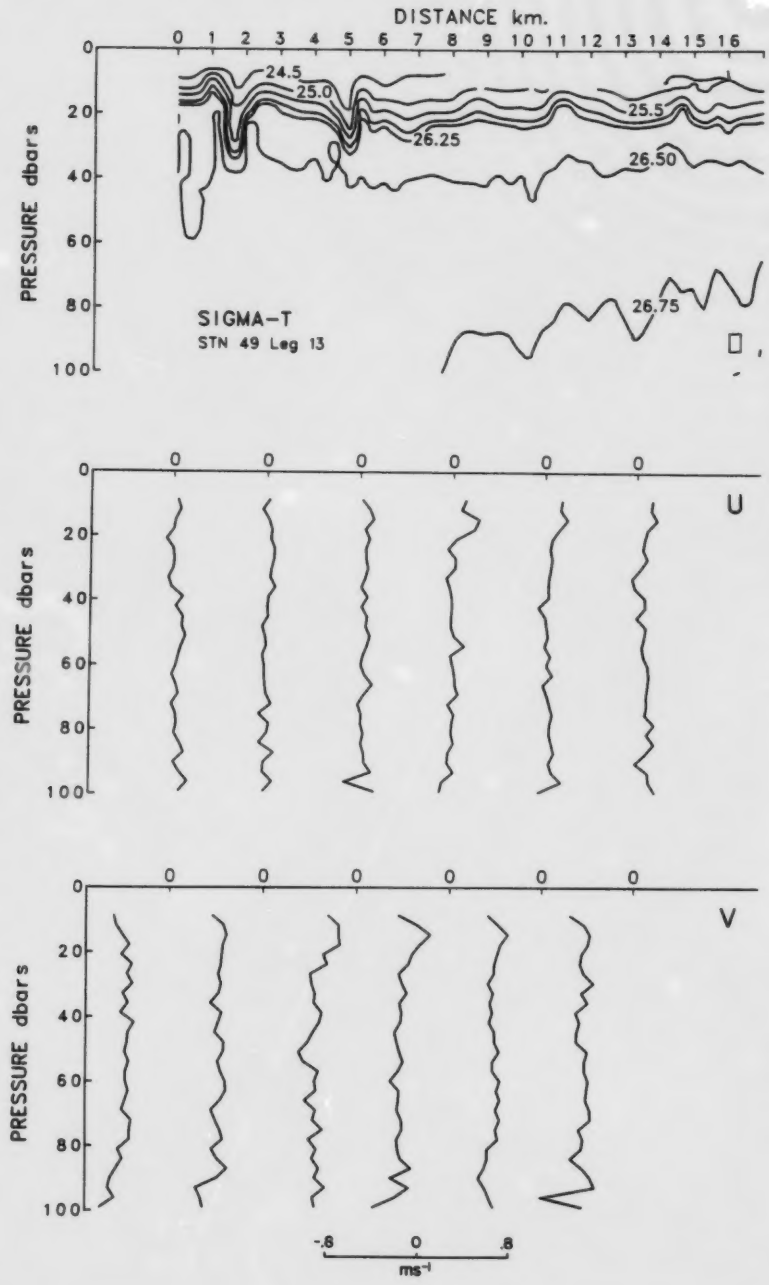

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.5
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 13
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 108

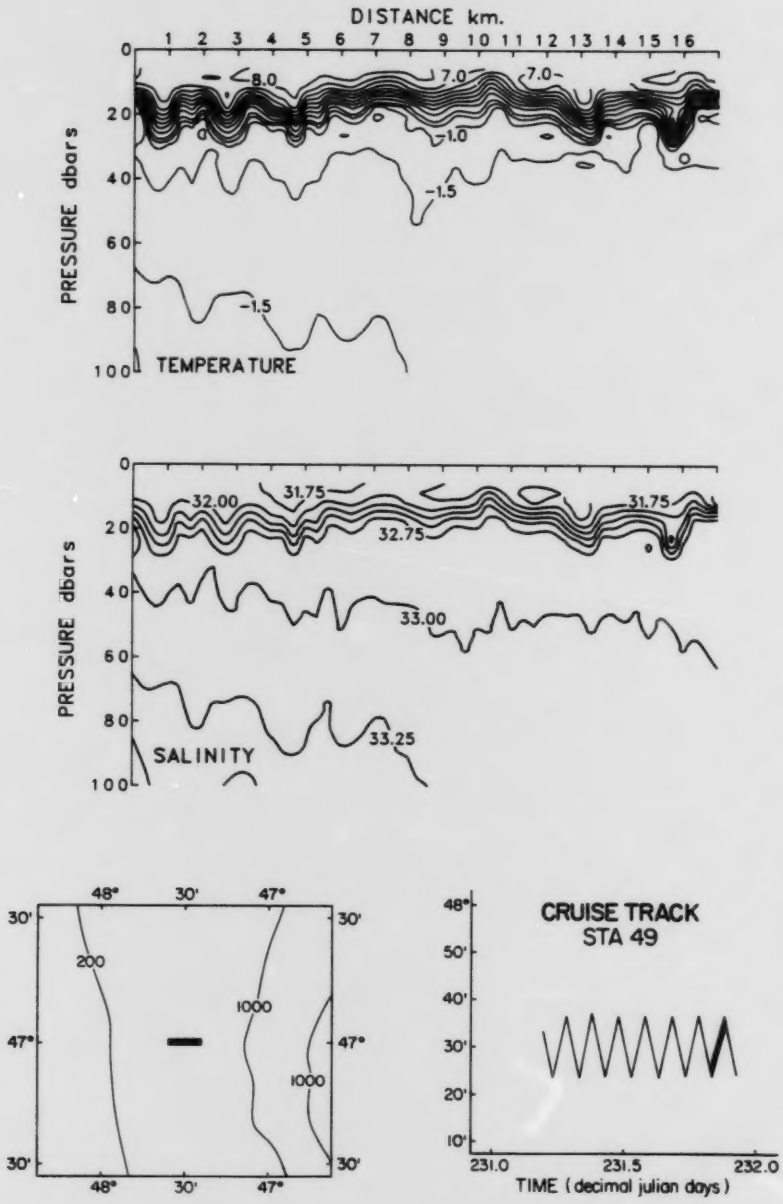

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
8.0
7.0
7.0
-1.0
-1.5
-1.5
TEMPERATURE
32.00
31.75
31.75
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
30'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 109

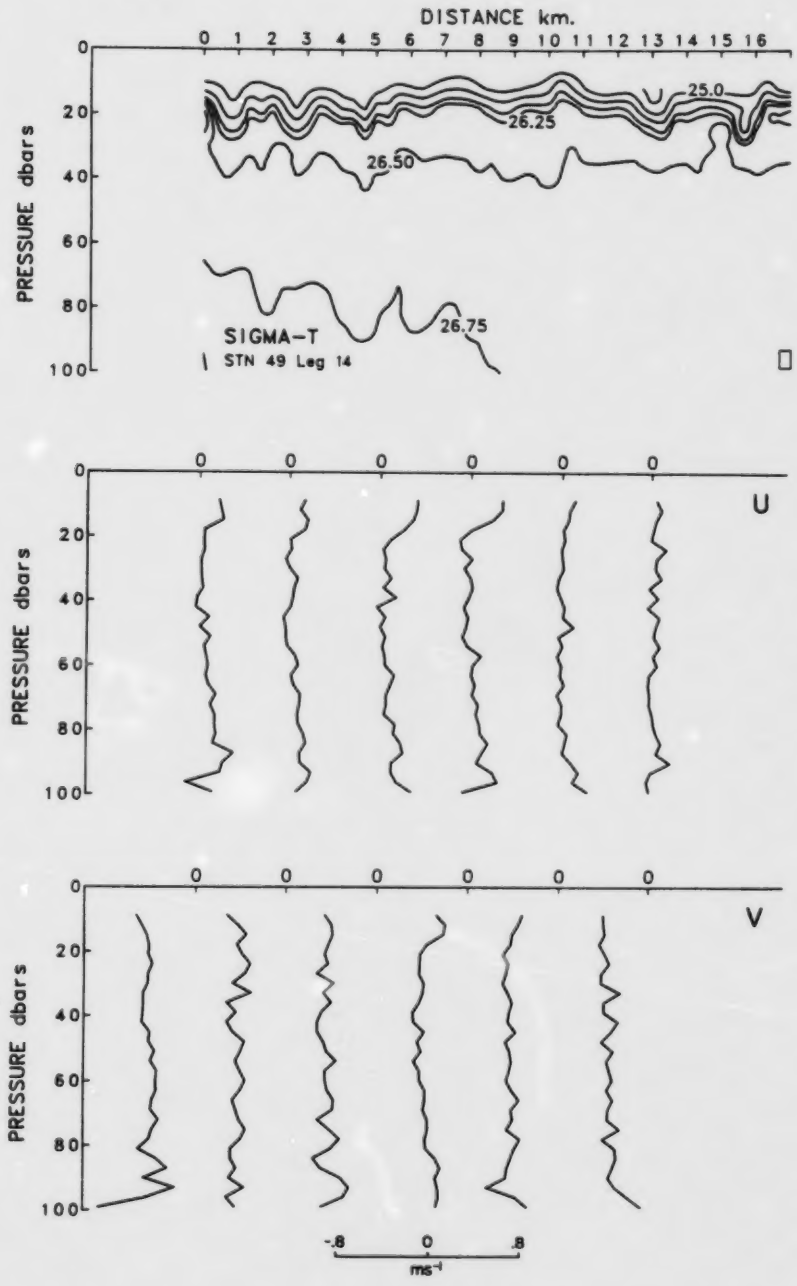

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.0
26.25
26.50
26.75
SIGMA-T
STN 49 Leg 14
U
V
-.8
0
.8
ms⁻¹

Fig. 110

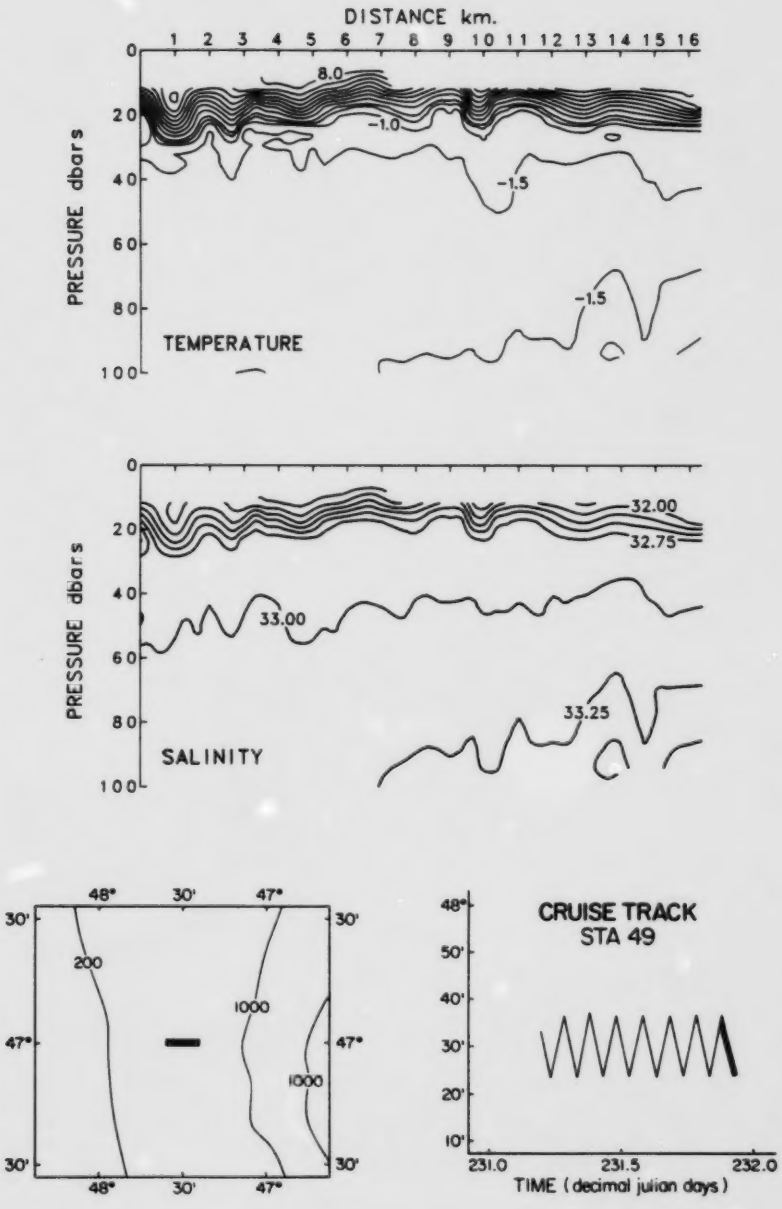

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
8.0
-1.0
-1.5
-1.5
TEMPERATURE
32.00
32.75
33.00
33.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 49
50'
40'
20'
10'
231.0
231.5
232.0
TIME (decimal julian days)

Fig. 111

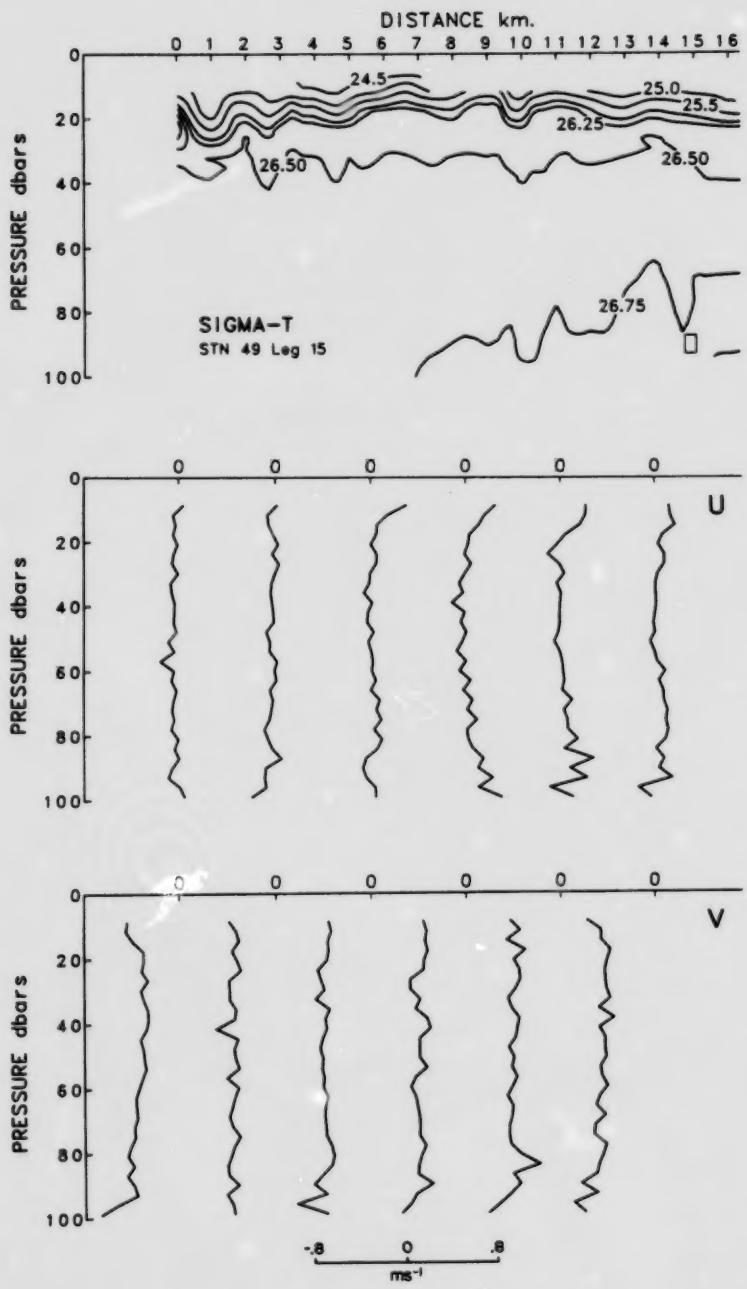

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
24.5
25.0
25.5
26.25
26.50
26.50
SIGMA-T
STN 49 Leg 15
26.75
U
V
-.8
0
.8
ms⁻¹

Fig. 112

Figures 113-138

BATFISH station 50; 13 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP (Acoustic Doppler Current Profiler), location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. The relative spacing of the U and V profiles reflects their relative position in the section. The null line of the first U and V profile is aligned vertically with the origin of the Sigma-t section.

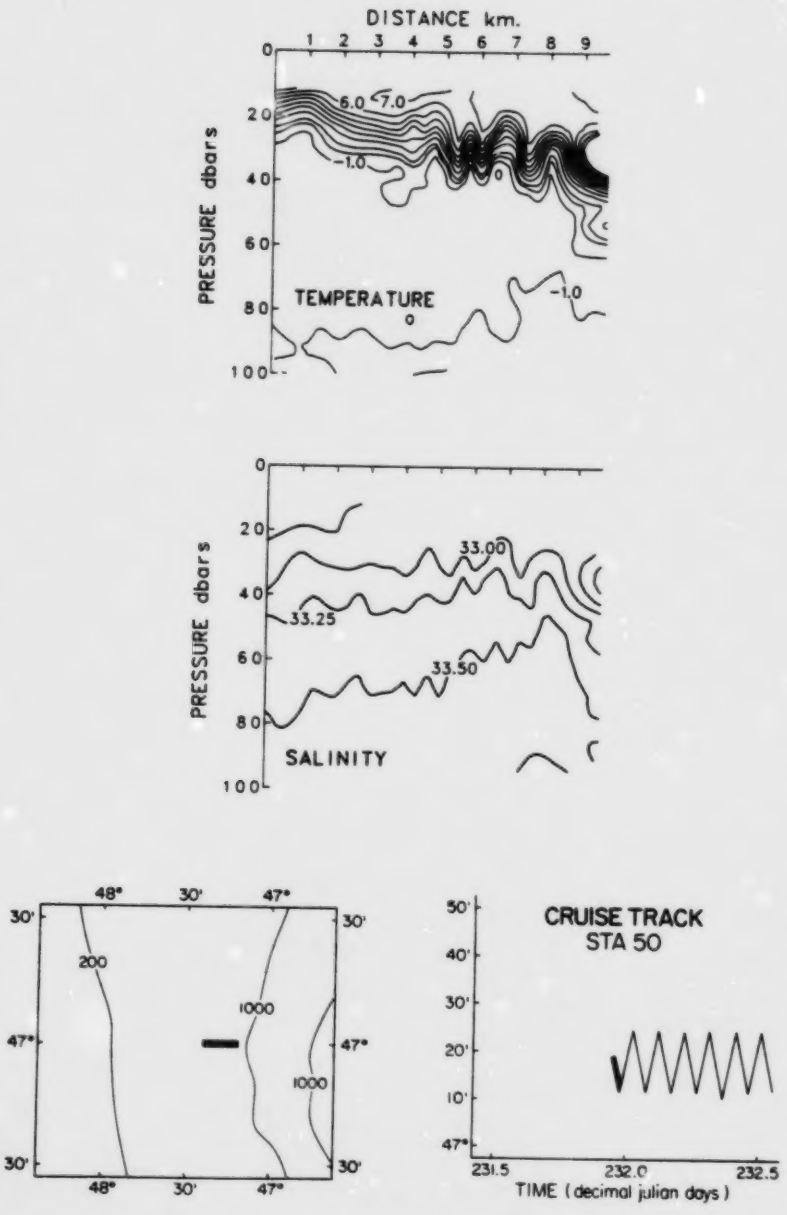

DISTANCE km.
1 2 3 4 5 6 7 8 9
0
20
40
60
80
100
PRESSURE dbars
6.0
7.0
-1.0
0
TEMPERATURE
-1.0
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
47°
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 113

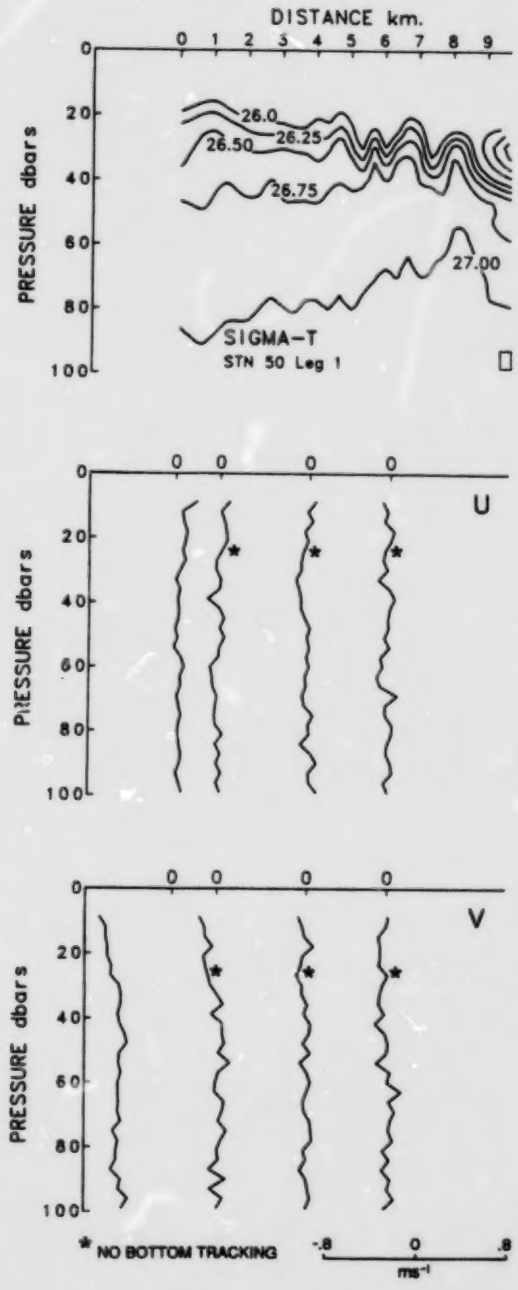

DISTANCE km.
0 1 2 3 4 5 6 7 8 9
PRESSURE dbars
0
20
40
60
80
100
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 1
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 114

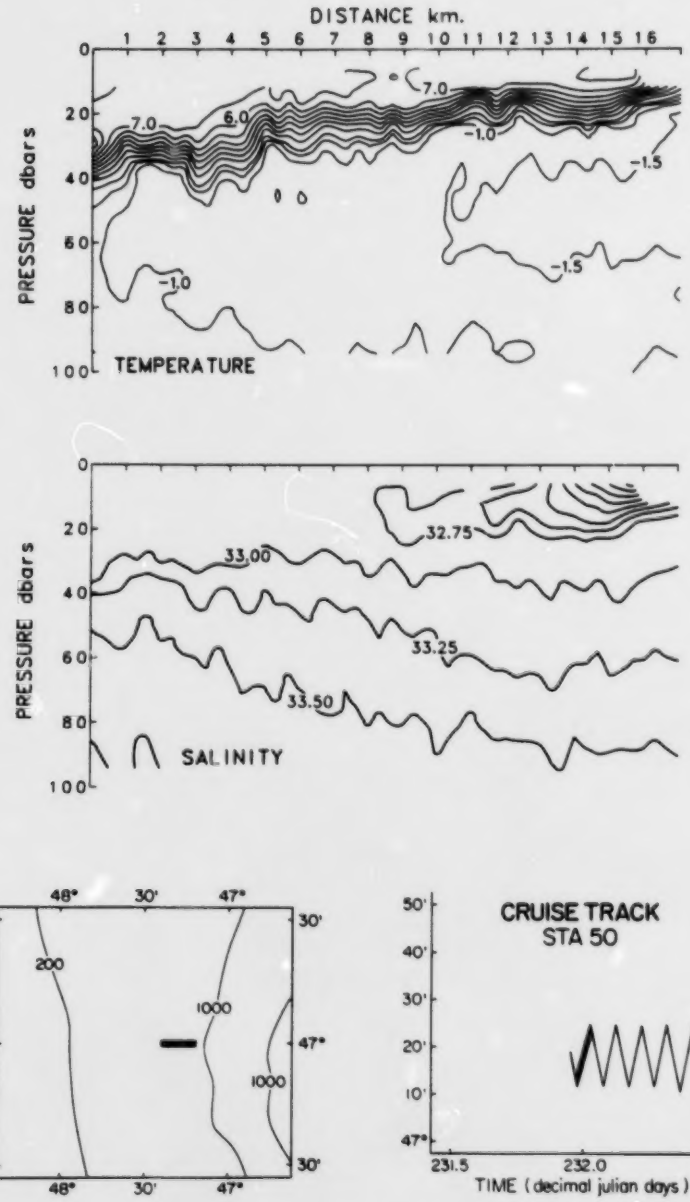

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
6.0
-1.0
-1.5
TEMPERATURE
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 115

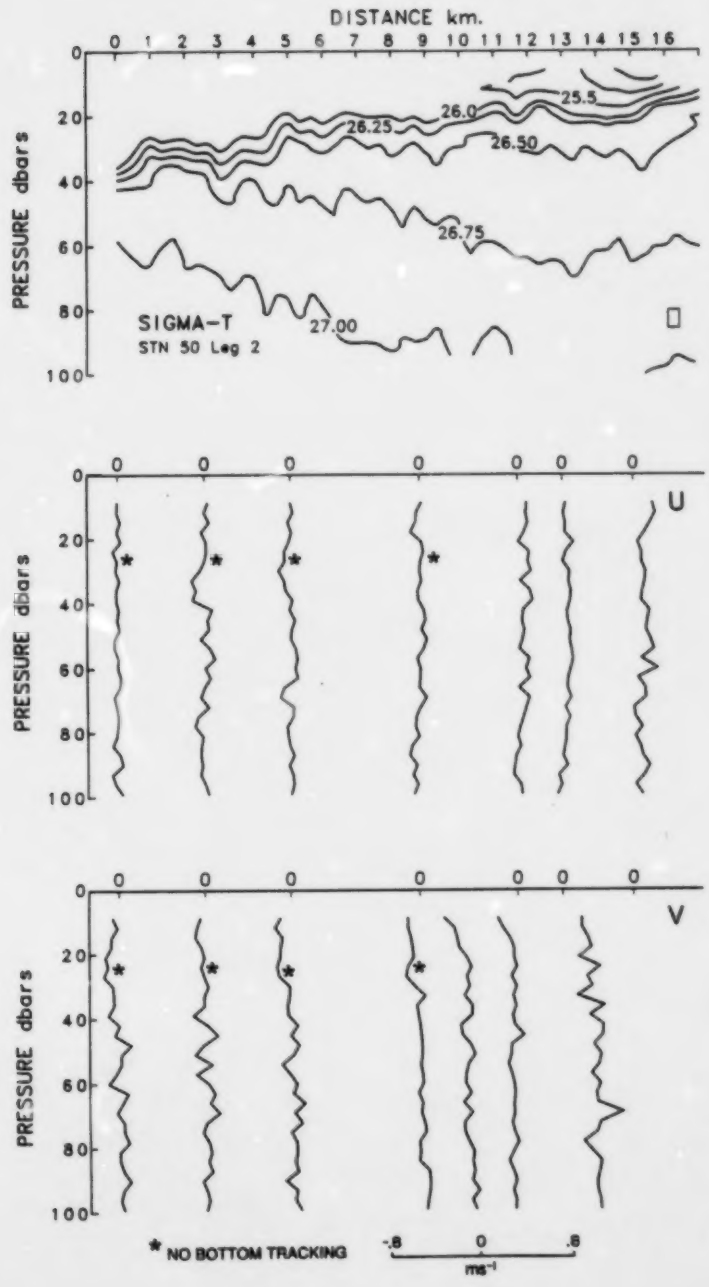

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 2
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 116

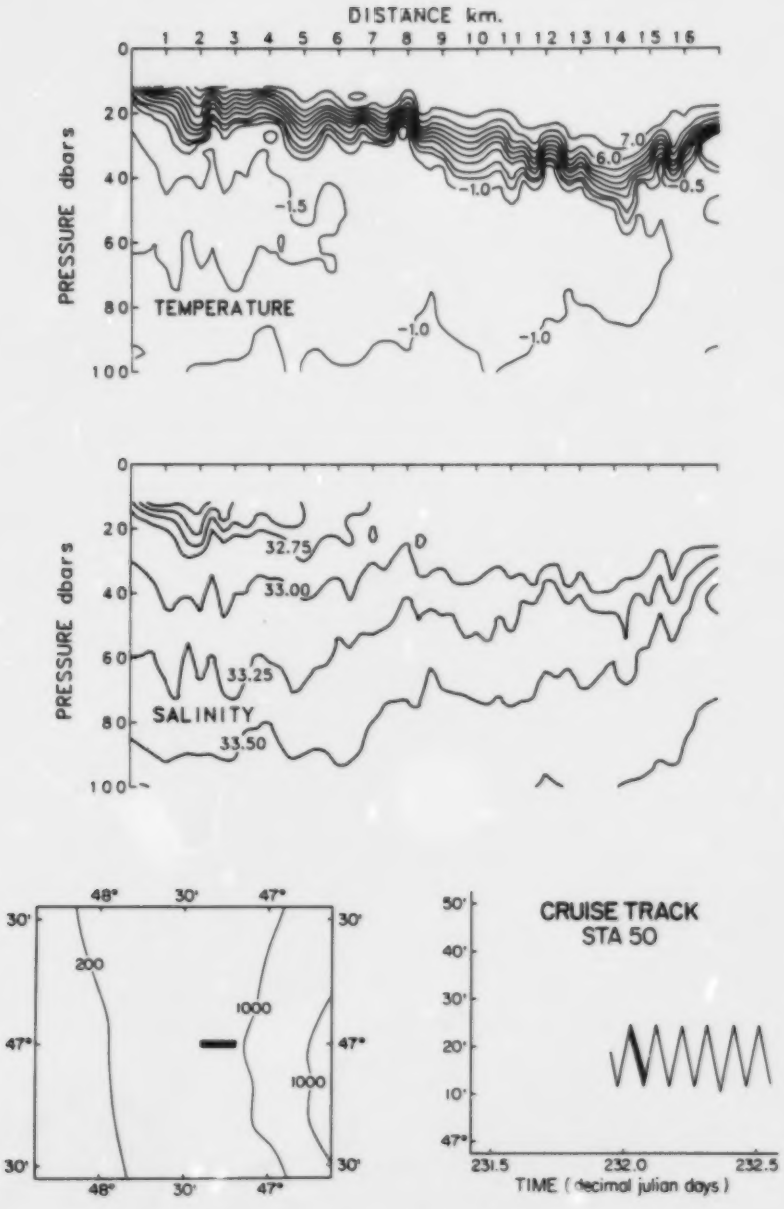

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
TEMPERATURE
7.0
6.0
0.5
-1.0
-1.5
0
-1.0
-1.0
SALINITY
32.75
33.00
33.25
33.50
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 117

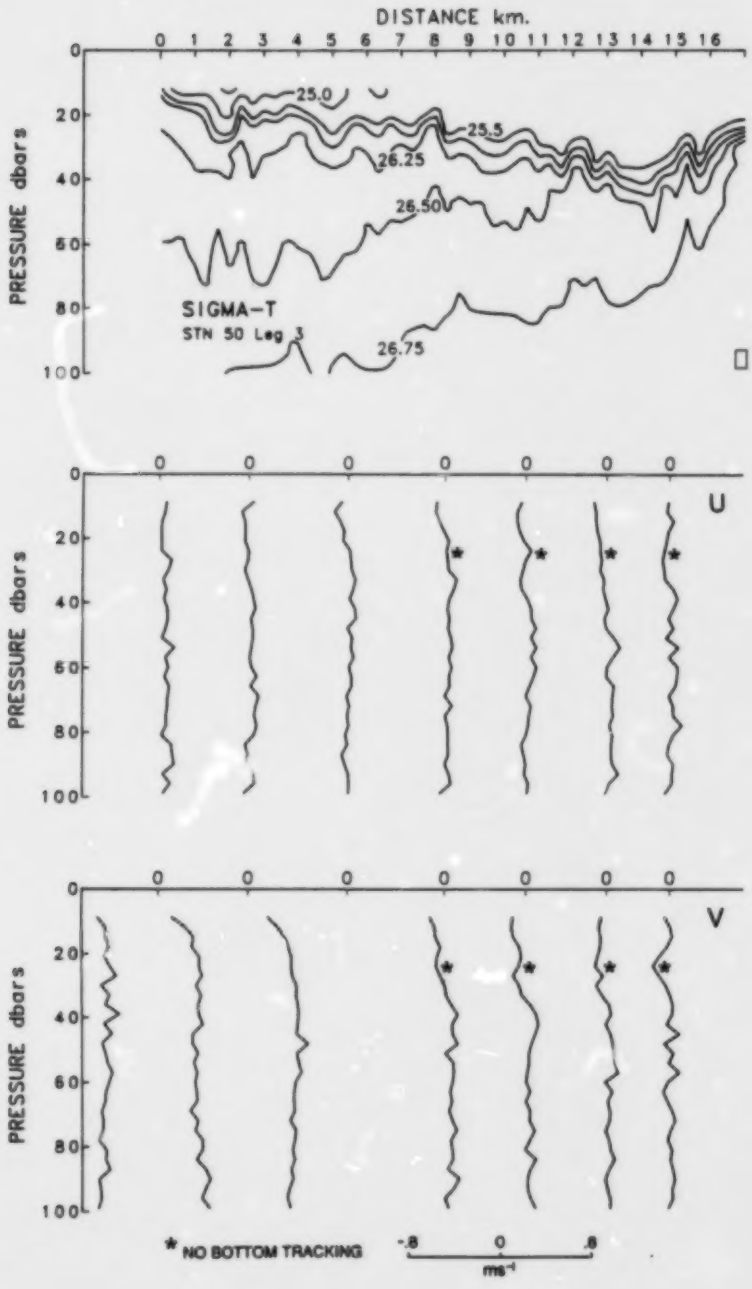

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.0
25.5
26.25
26.50
26.75
SIGMA-T
STN 50 Leg 3
U
V
0 0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 118

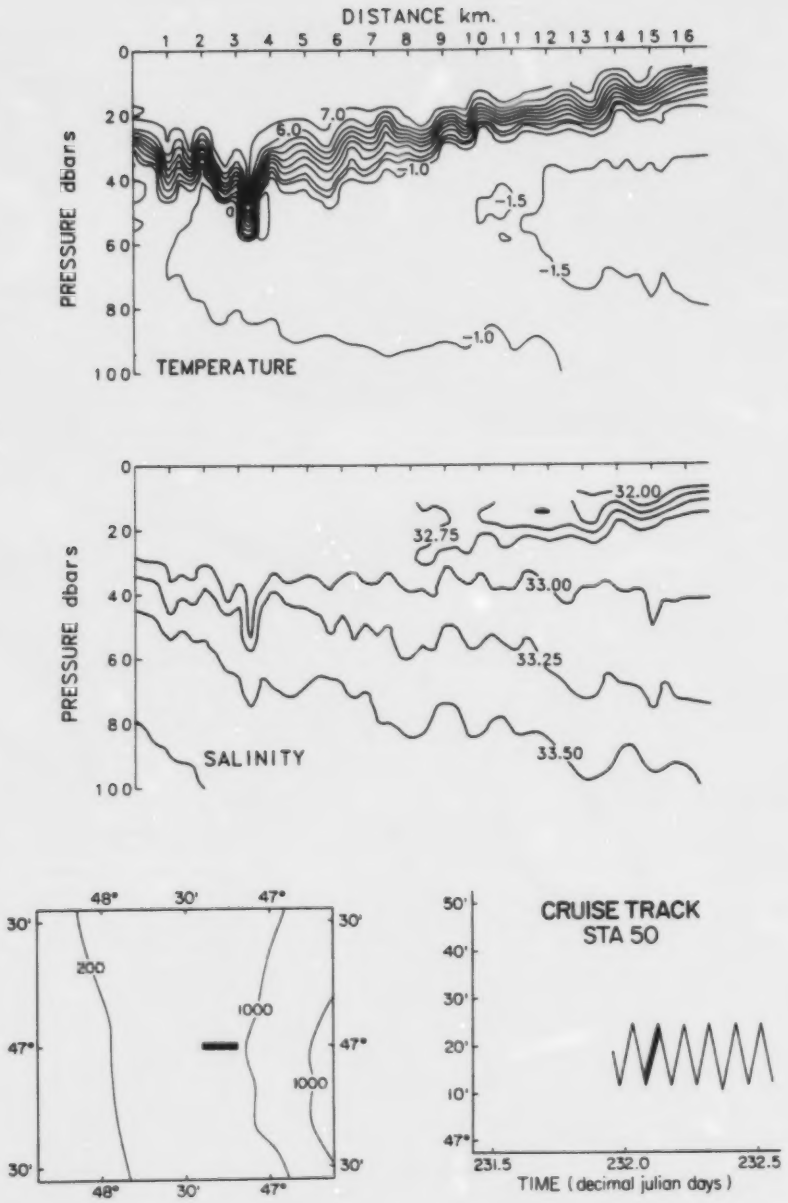

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
6.0
1.0
-1.5
-1.5
-1.0
TEMPERATURE
32.00
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 119

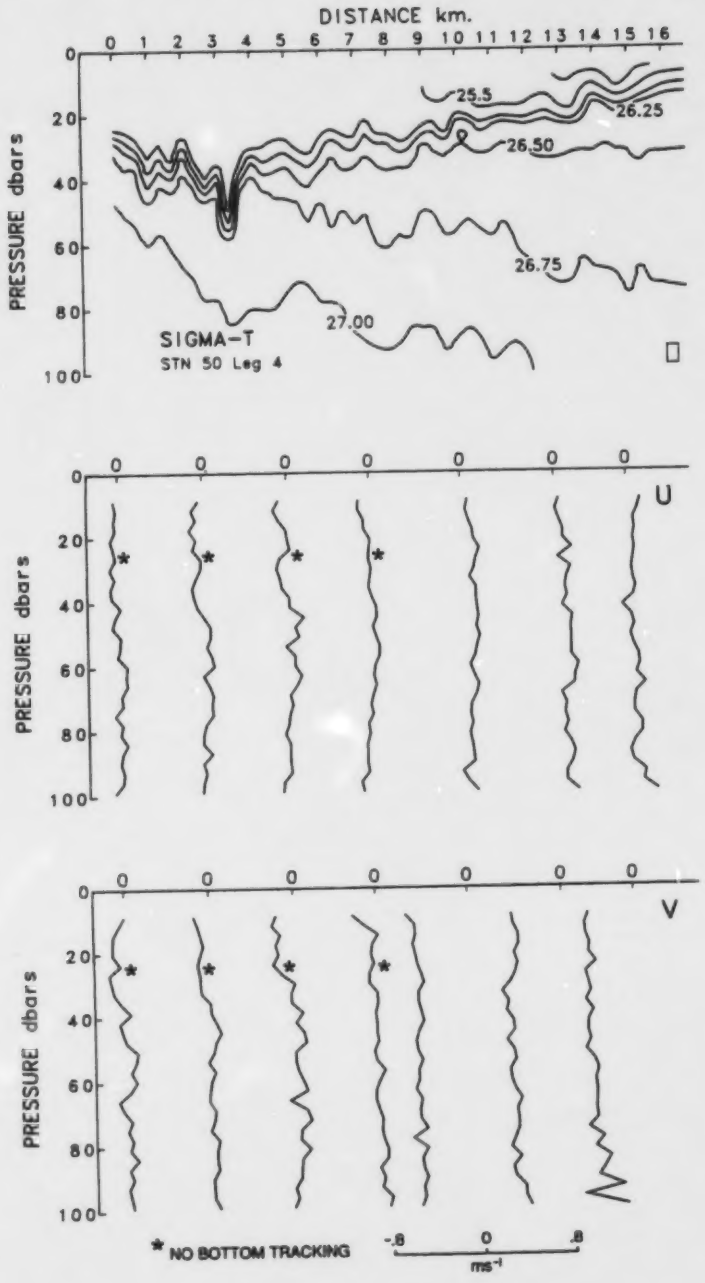

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 4
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 120

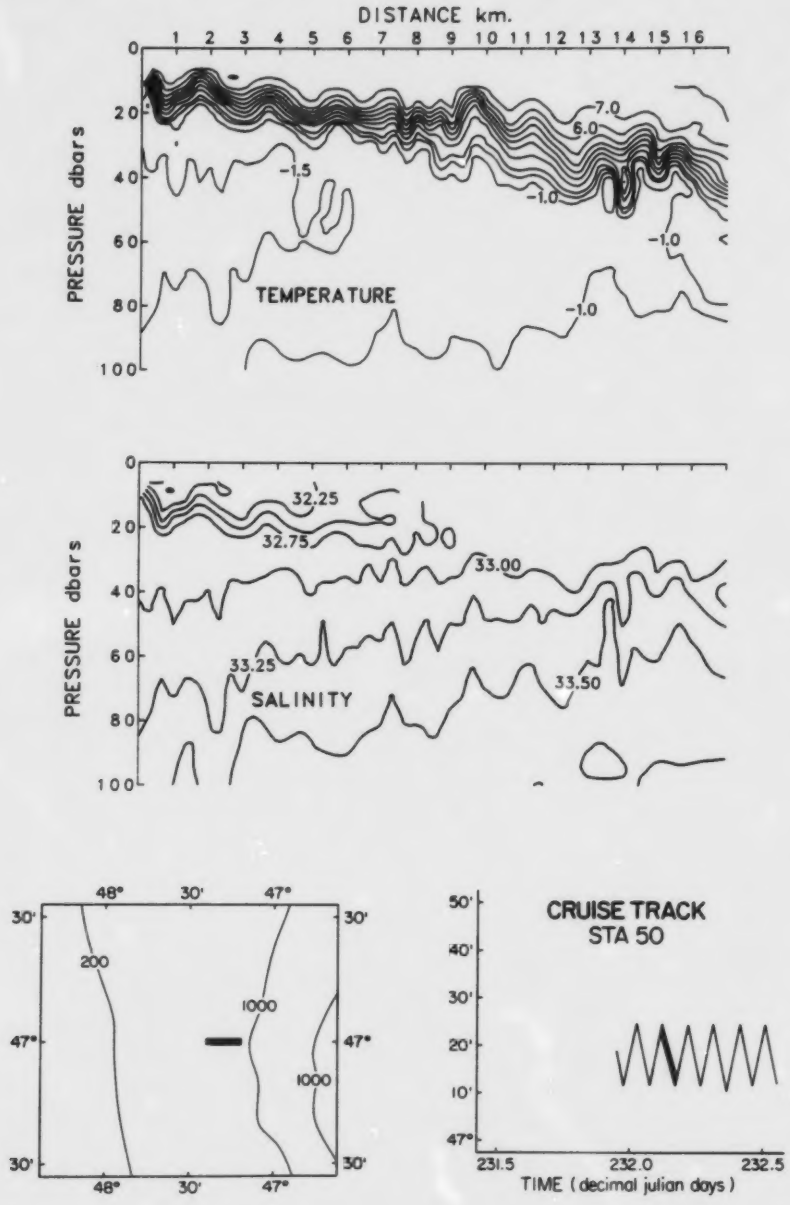

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
6.0
-1.5
-1.0
-1.0
-1.0
TEMPERATURE
32.25
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
47°
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 121

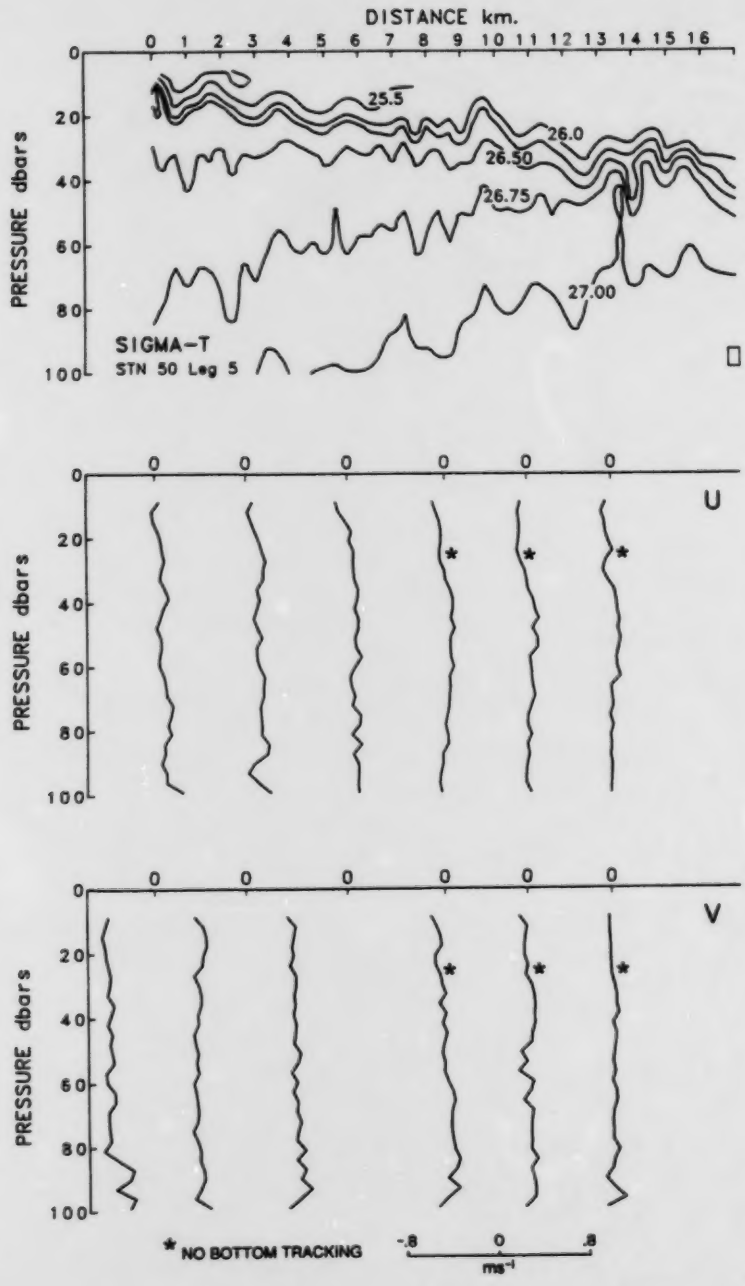

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 5
U
V
0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 122

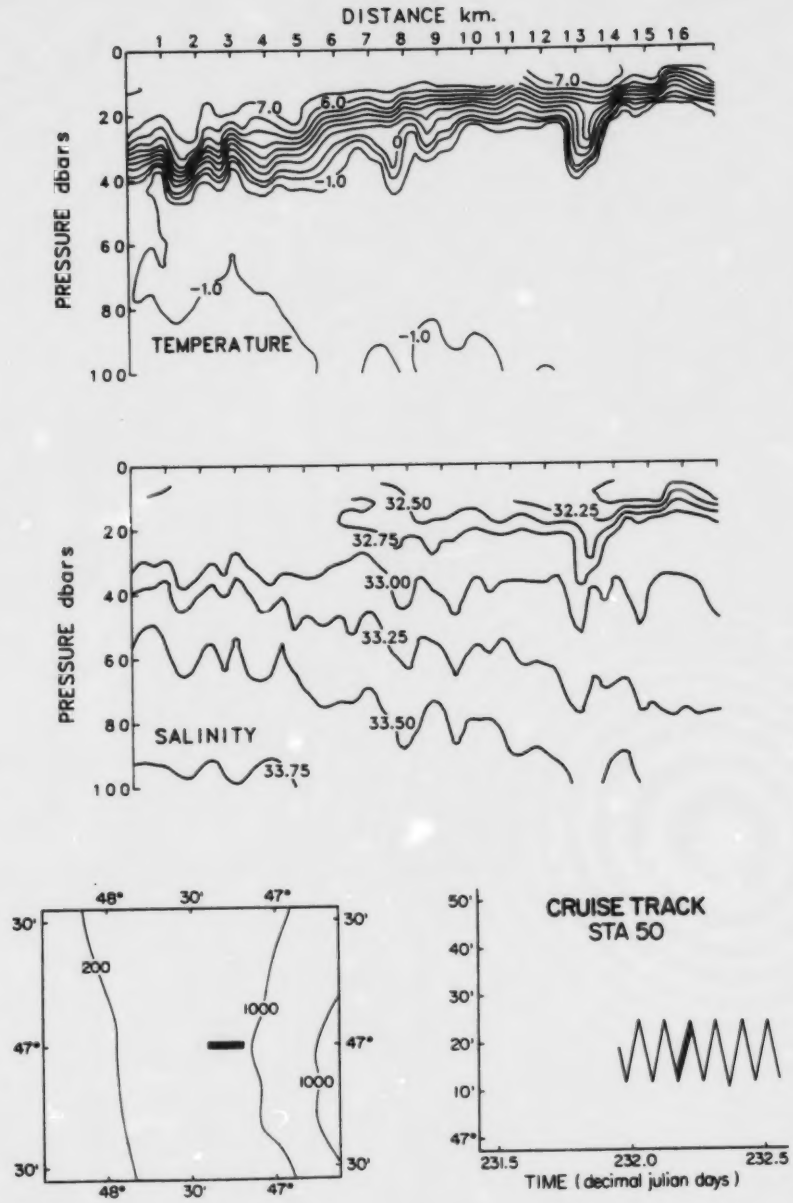

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
6.0
0
-1.0
TEMPERATURE
32.50
32.25
32.75
33.00
33.25
33.50
SALINITY
33.75
48°
30'
47°
200
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 123

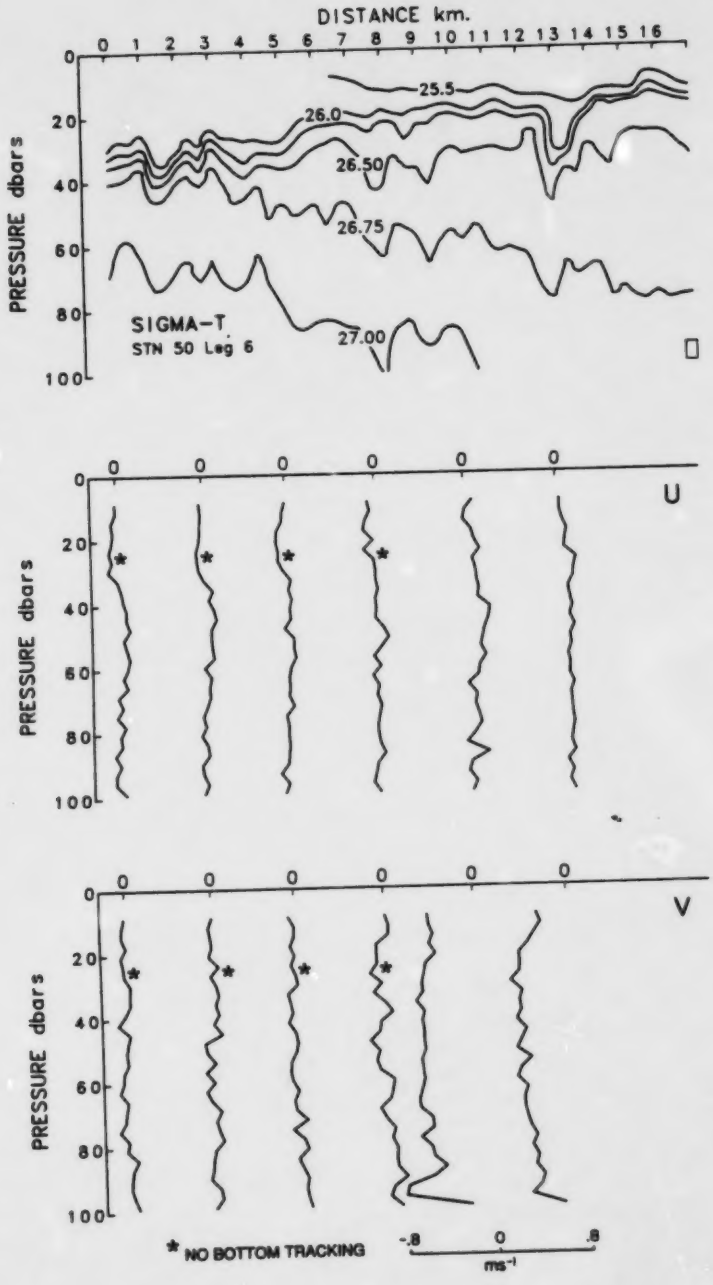

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 6
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 124

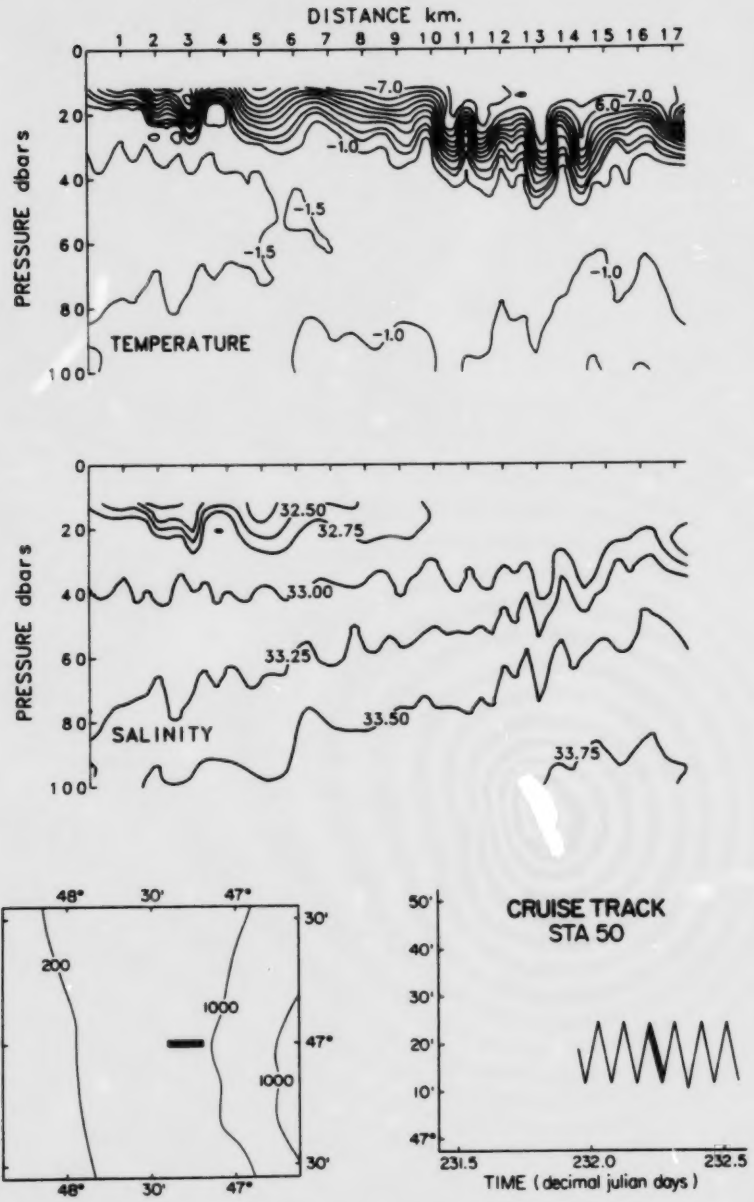

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
-7.0
-7.0
-6.0
-1.0
-1.5
-1.5
-1.0
-1.0
TEMPERATURE
32.50
32.75
33.00
33.25
33.50
33.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
47°
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 125

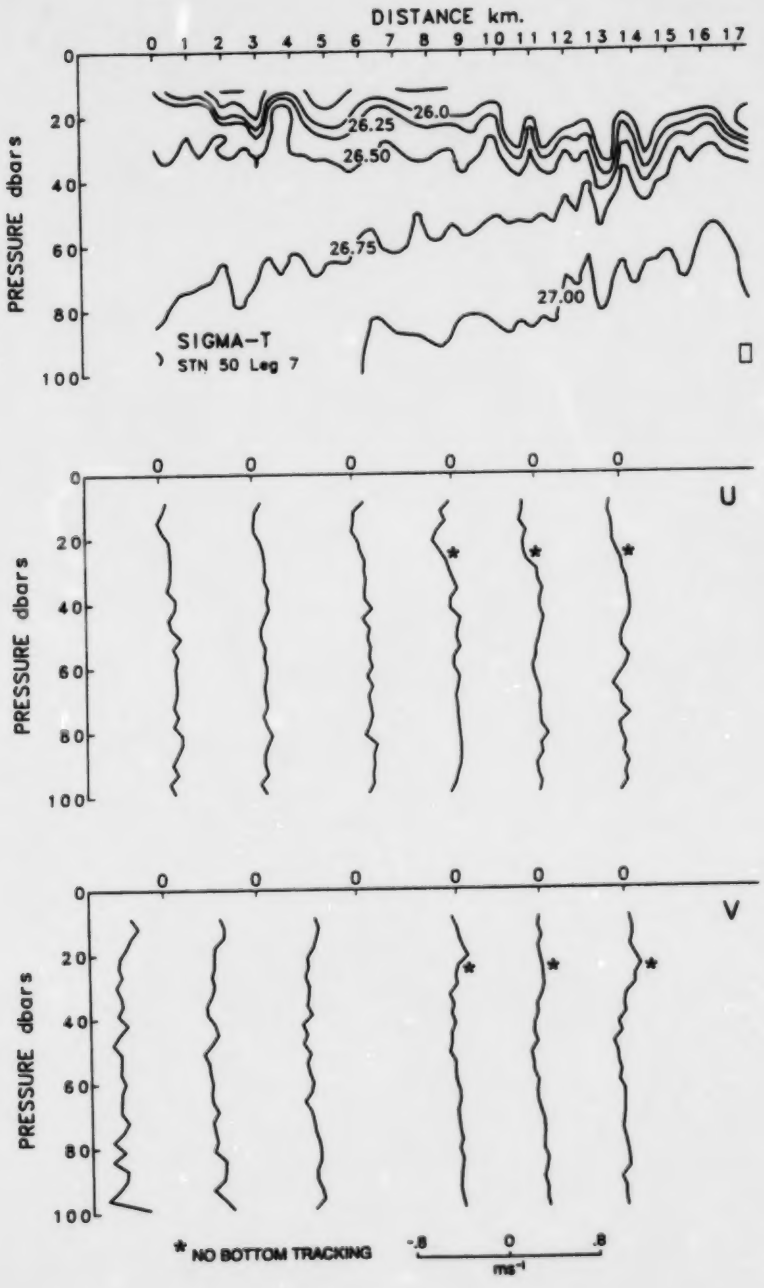

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRESSURE dbars
0
20
40
60
80
100
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 7
U
V
0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 126

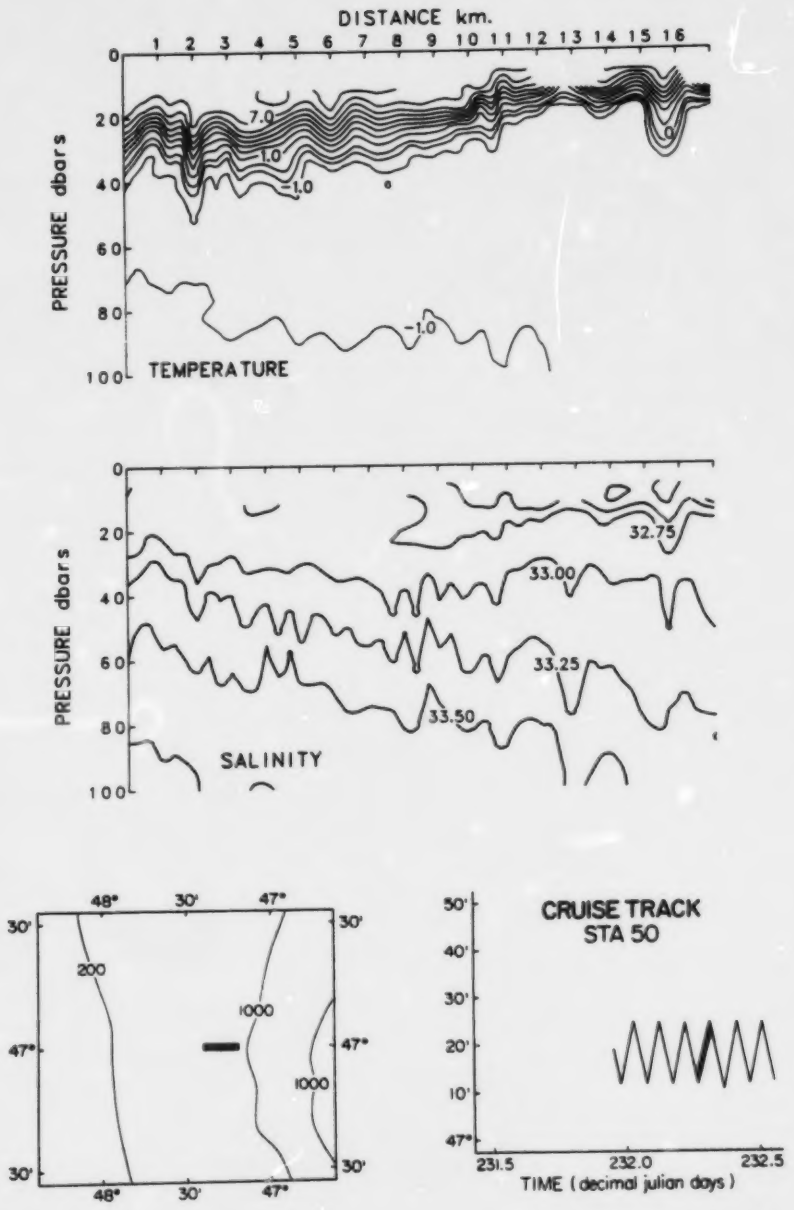

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
7.0
1.0
-1.0
-1.0
TEMPERATURE
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 127

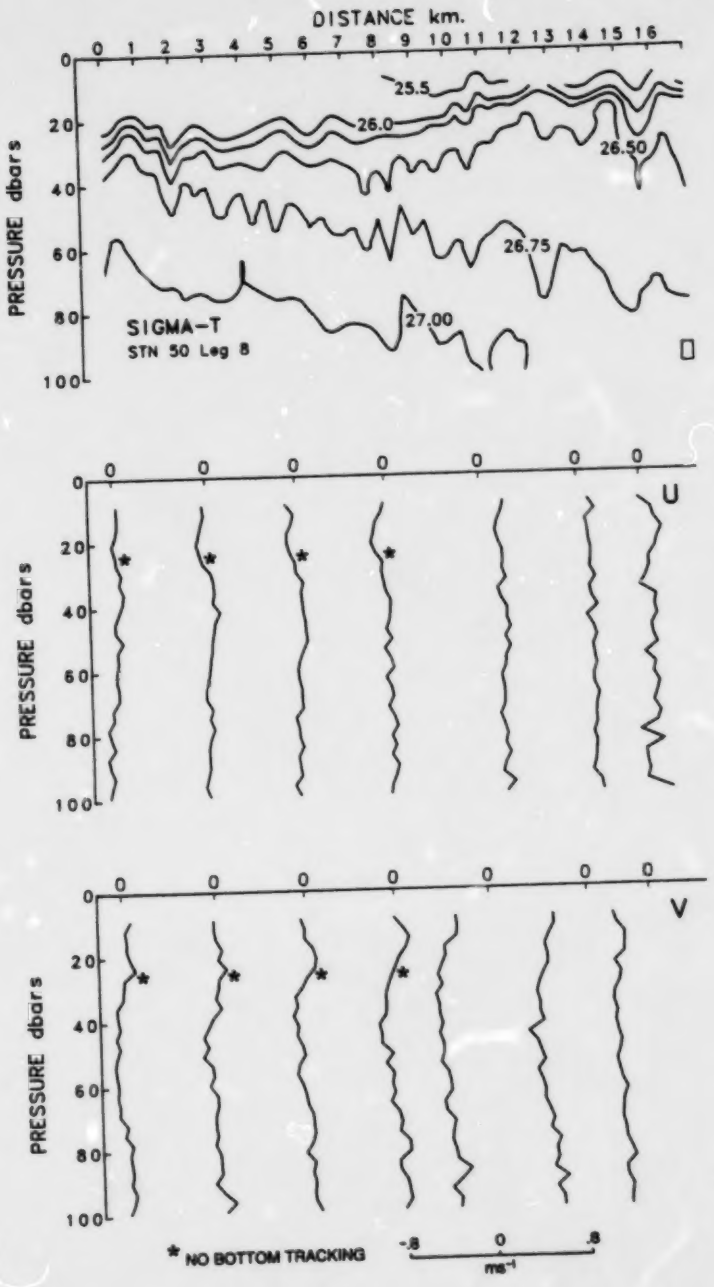

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 8
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 128

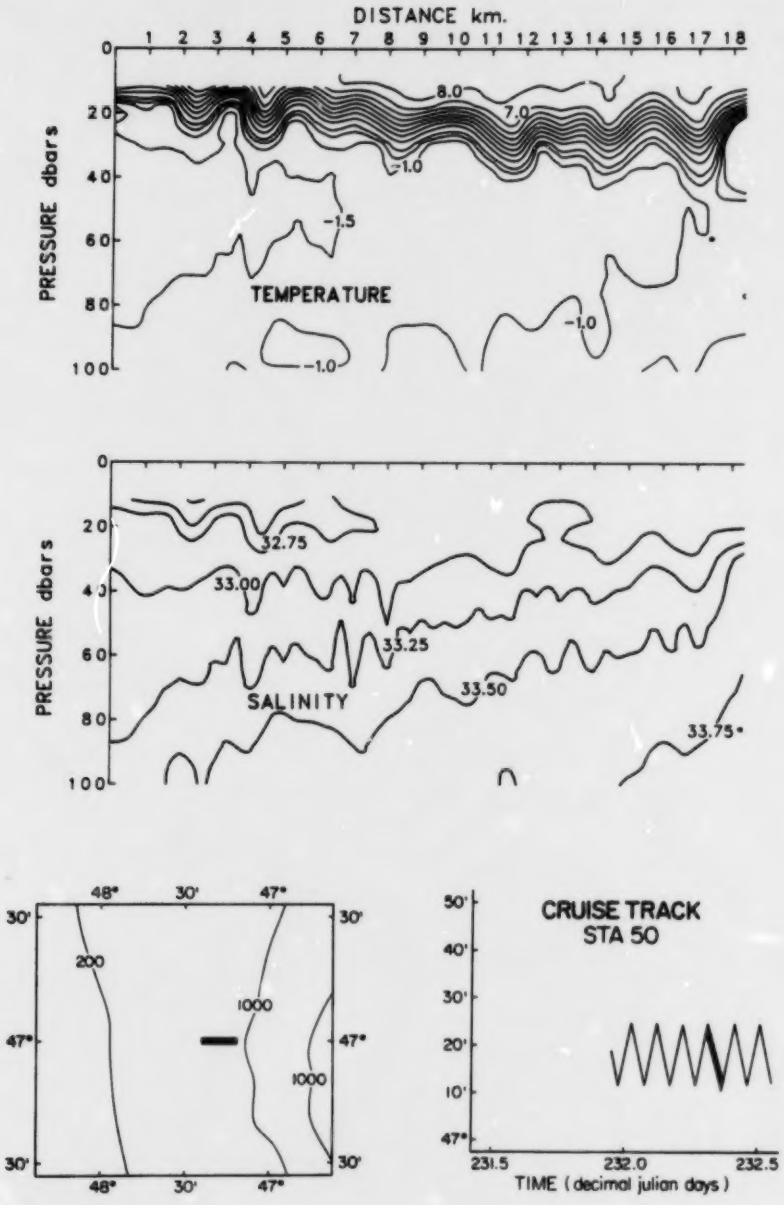

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.5
TEMPERATURE
-1.0
-1.0
32.75
33.00
33.25
33.50
33.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 129

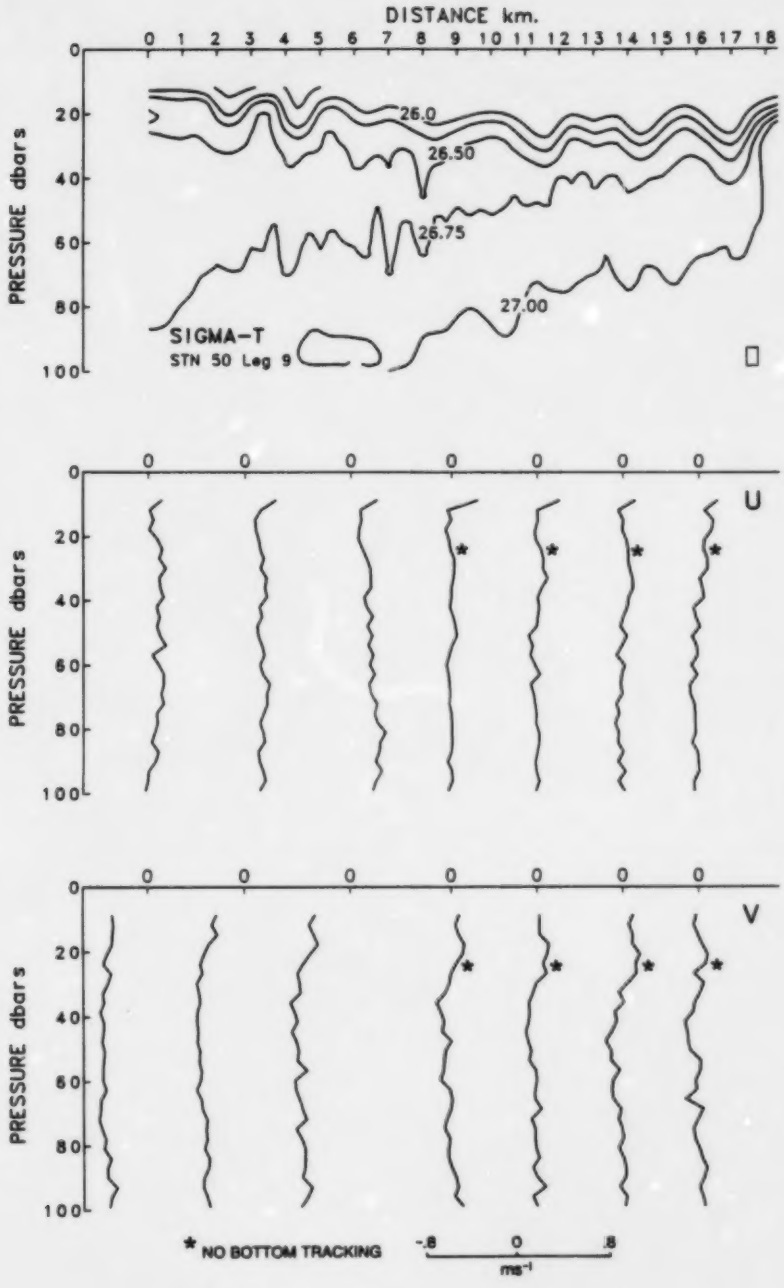

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
PRESSURE dbars
0
20
40
60
80
100
26.0
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 9
U
V
0 0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 130

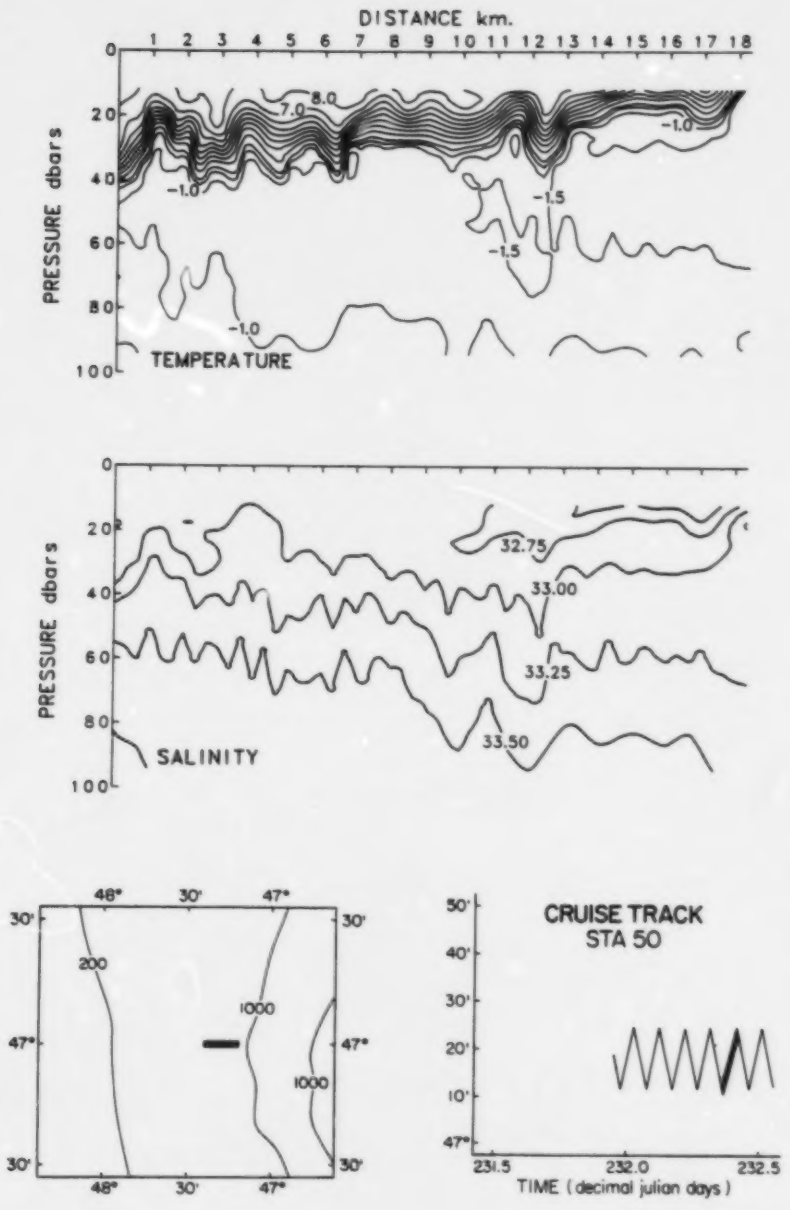

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.0
-1.5
-1.5
-1.0
TEMPERATURE
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 131

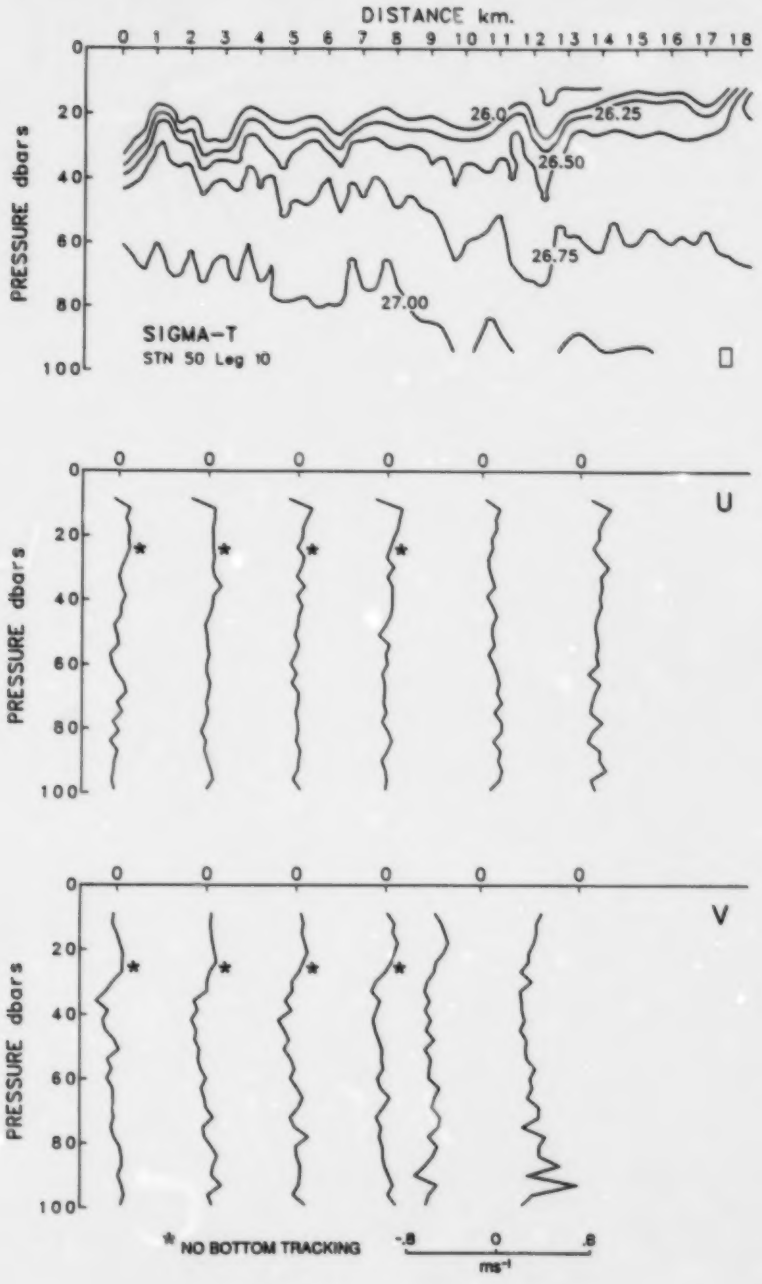

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
PRESSURE dbars
0
20
40
60
80
100
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 10
U
V
0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 132

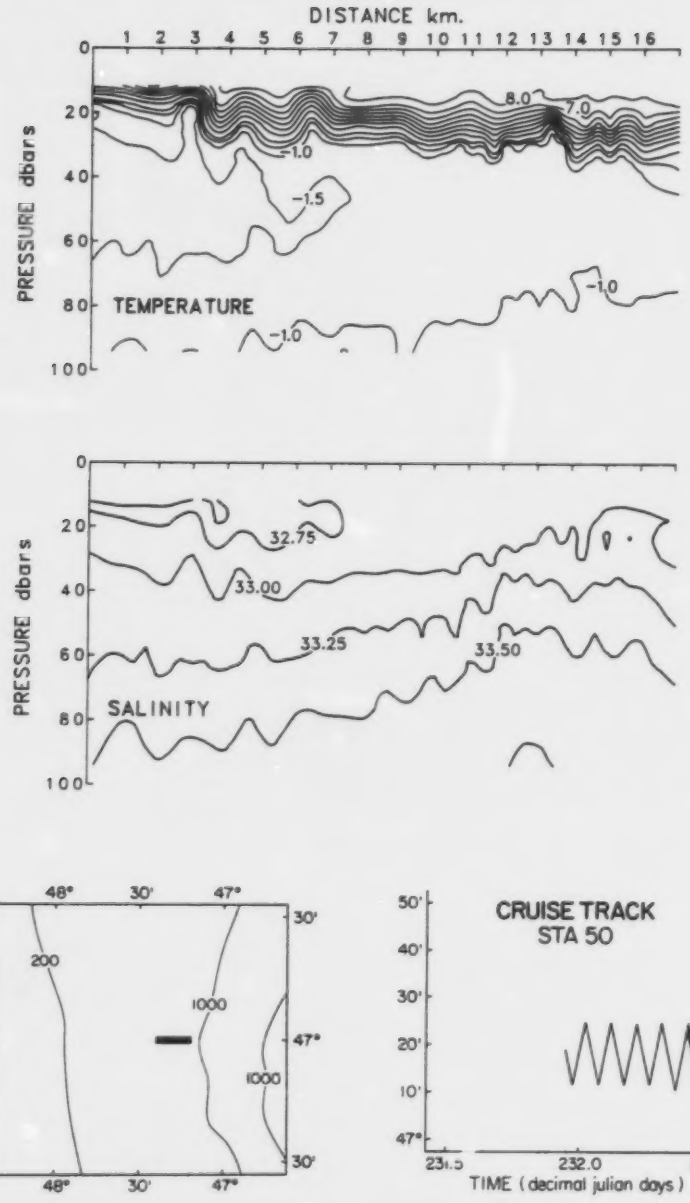

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.5
TEMPERATURE
-1.0
-1.0
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
47°
232.0
232.5
TIME (decimal julian days)

Fig. 133

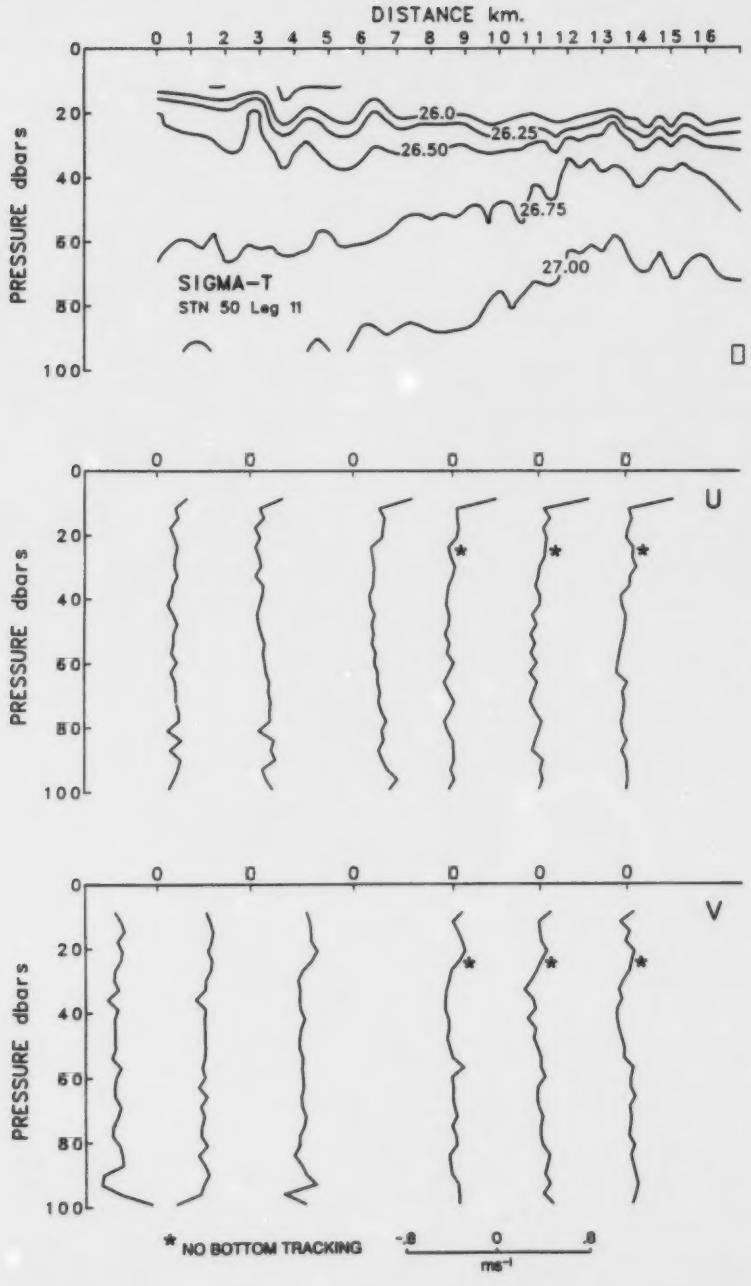
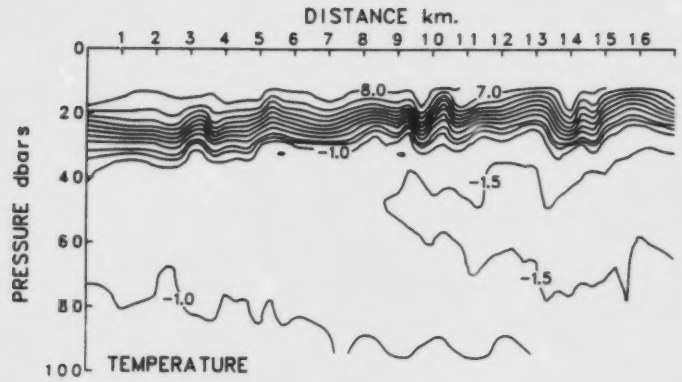
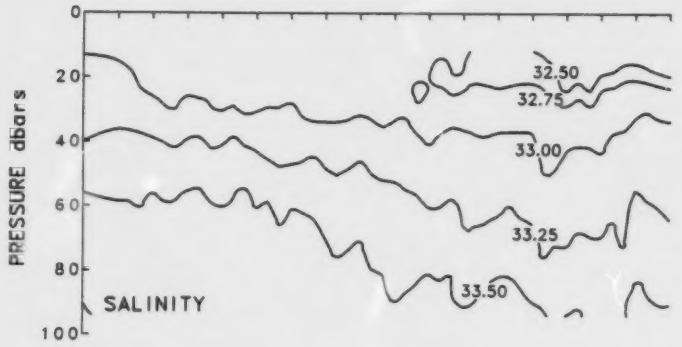

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 11
U
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 134


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0
20
40
60
80
100
PRESSURE dbars
8.0
7.0
-1.0
-1.5
-1.5
-1.0
TEMPERATURE


0
20
40
60
80
100
PRESSURE dbars
32.50
32.75
33.00
33.25
33.50
SALINITY

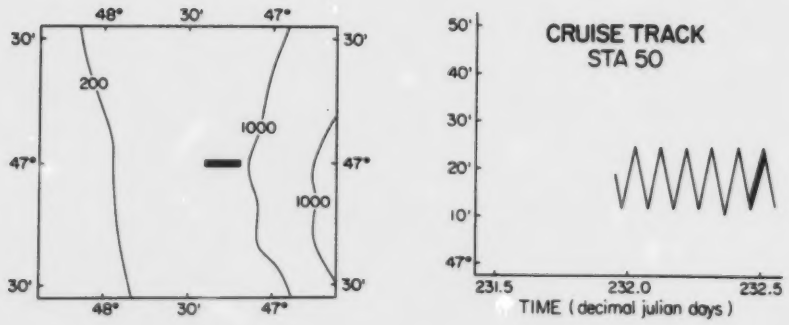

48°
30'
47°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°
30'
CRUISE TRACK
STA 50
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 135

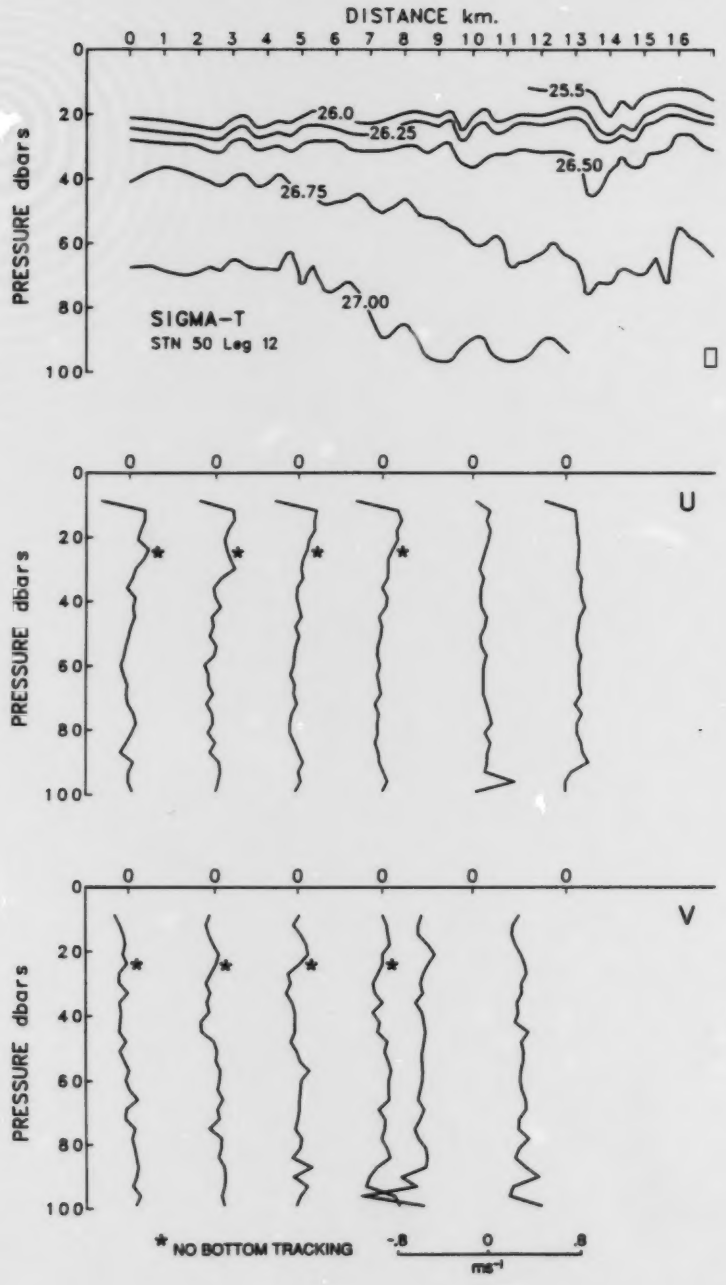

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.25
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 12
U
V
0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 136

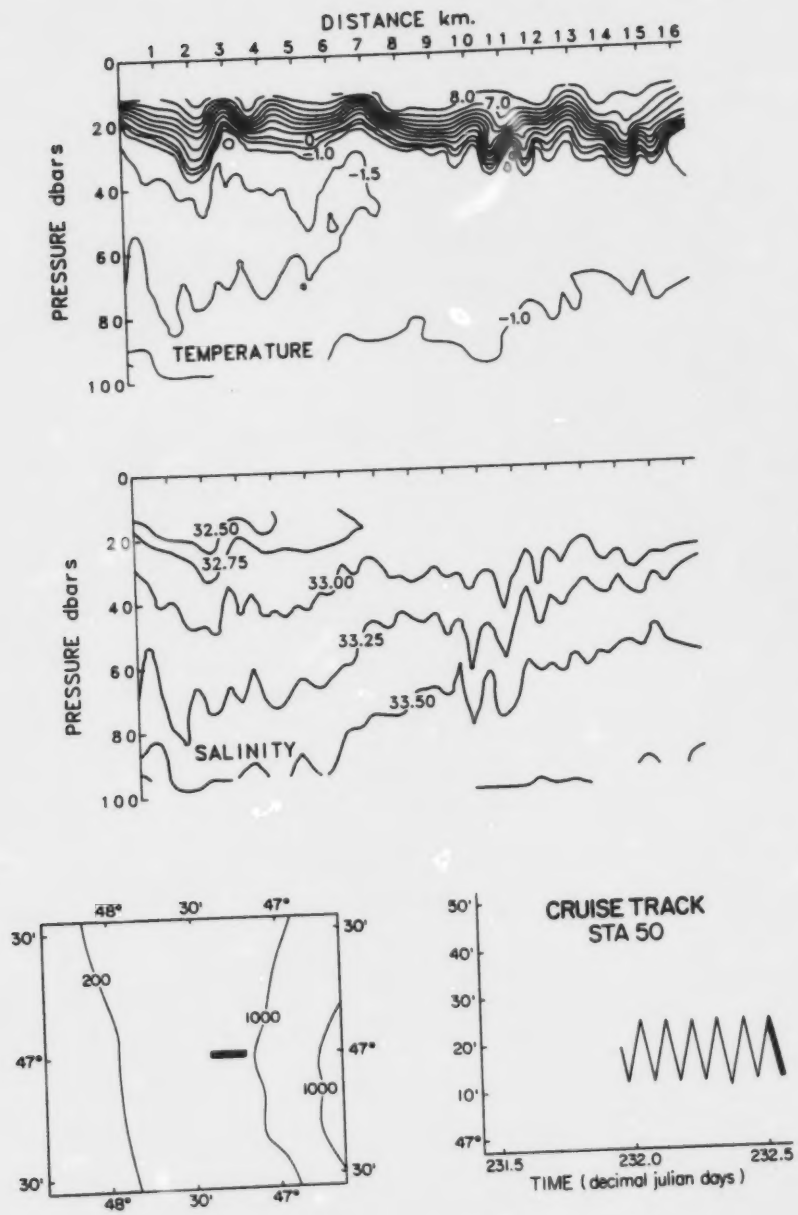

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
8.0
7.0
0
-1.0
-1.5
-1.0
TEMPERATURE
32.50
32.75
33.00
33.25
33.50
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 50
50'
40'
30'
20'
10'
231.5
232.0
232.5
TIME (decimal julian days)

Fig. 137

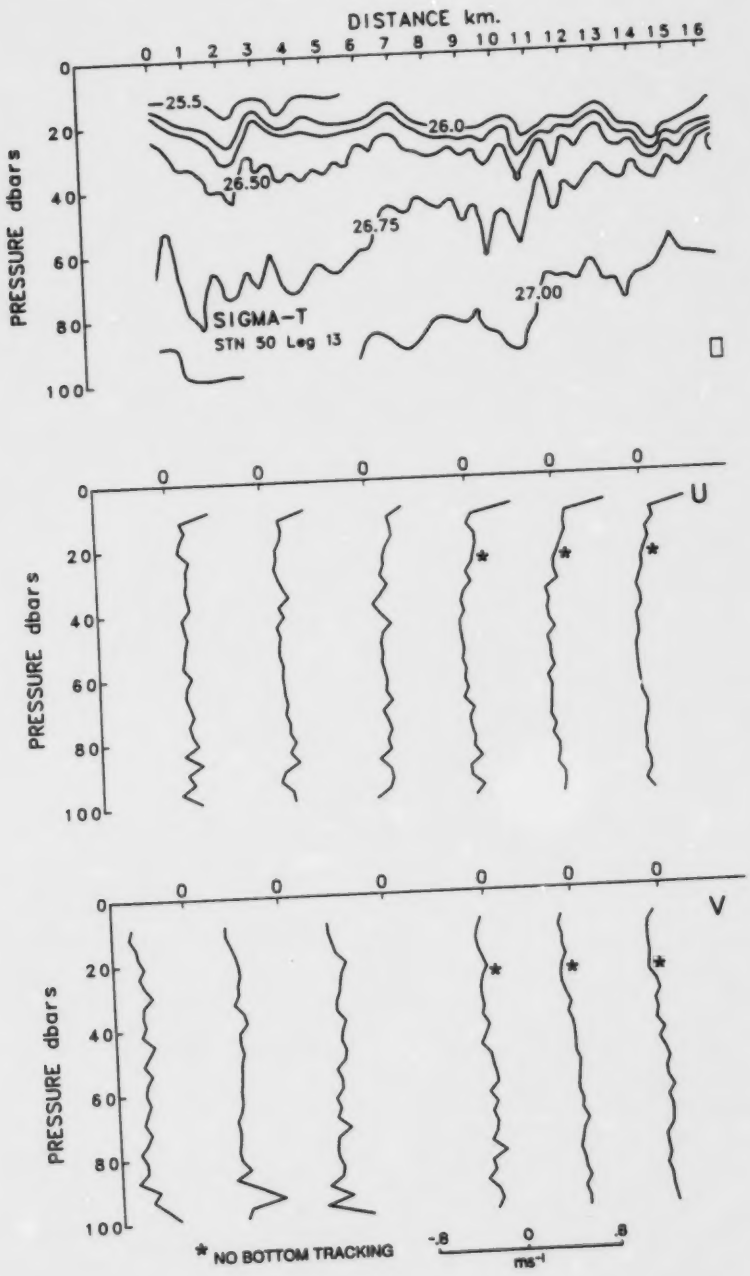

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PRESSURE dbars
0
20
40
60
80
100
25.5
26.0
26.50
26.75
27.00
SIGMA-T
STN 50 Leg 13
U
V
0 0 0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms-1

Fig. 138

Figures 139-162

BATFISH station 52; 6 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

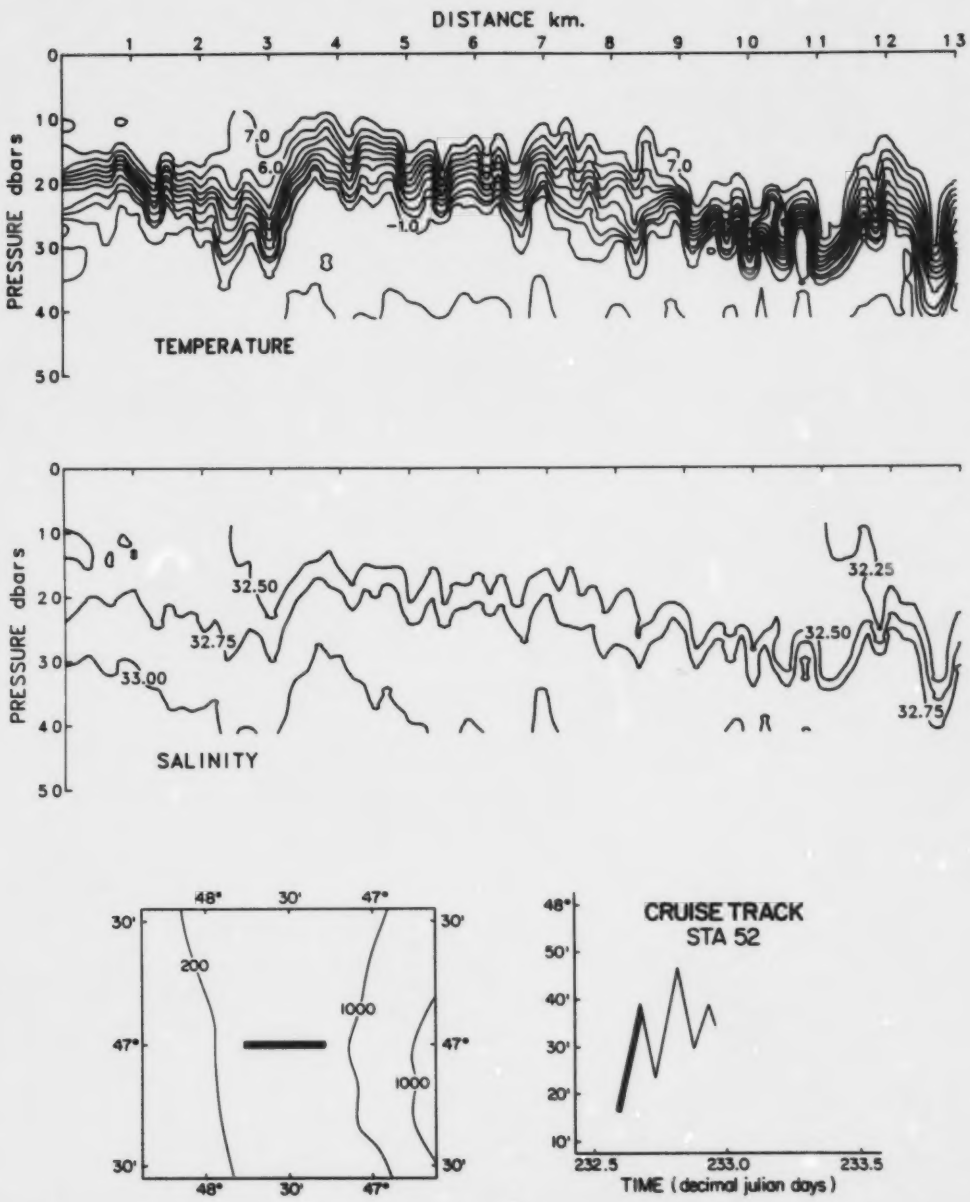

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
7.0
6.0
-1.0
7.0
TEMPERATURE
32.50
32.75
33.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 52
50'
40'
20'
10'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 139

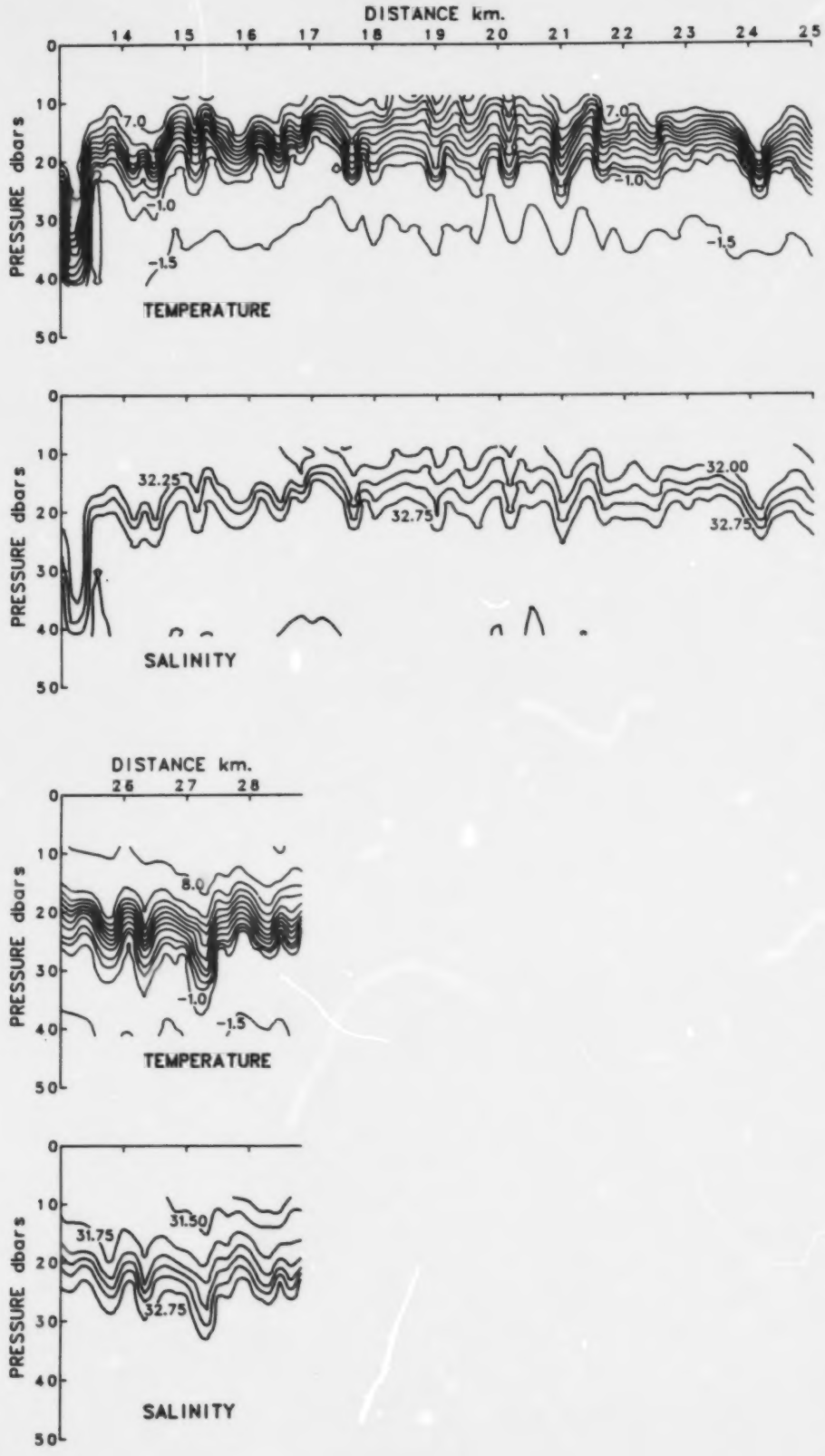

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
7.0
-1.0
-1.5
TEMPERATURE
32.25
32.75
32.00
SALINITY
DISTANCE km.
26 27 28
8.0
-1.0
-1.5
TEMPERATURE
31.75
31.50
32.75
SALINITY

Fig. 140

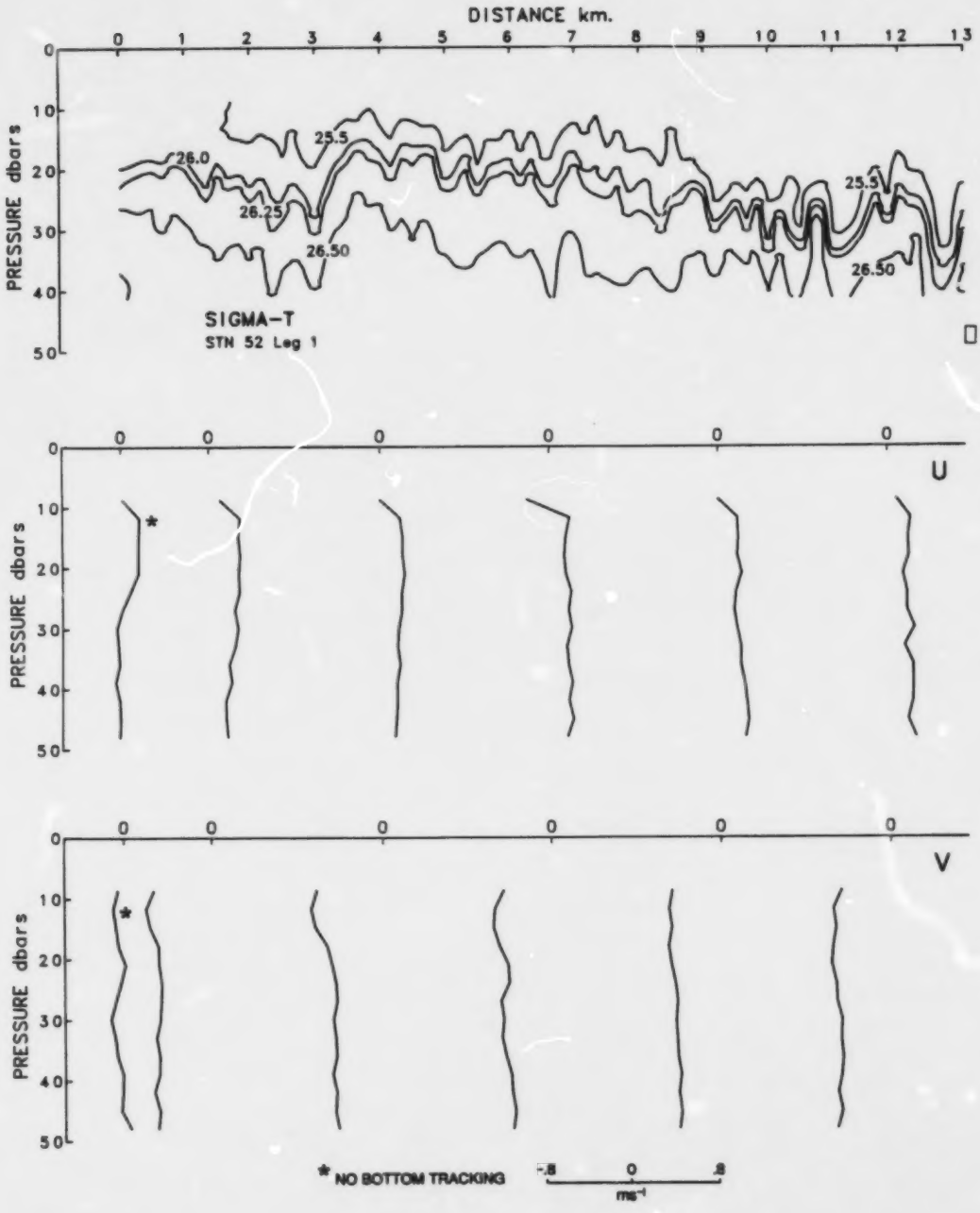

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.5
26.0
26.25
26.50
25.5
26.50
SIGMA-T
STN 52 Leg 1
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 141

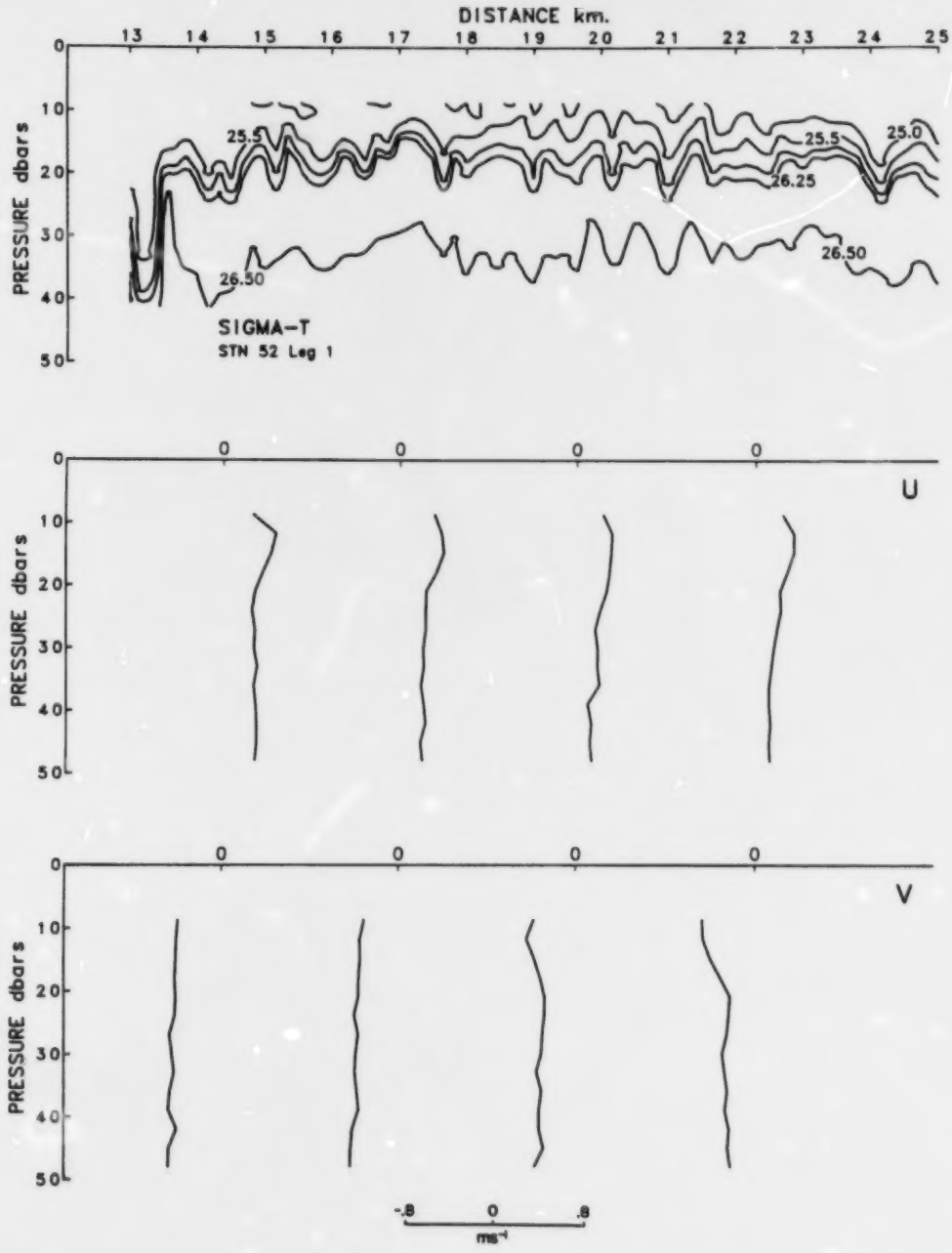

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
25.5
25.5
25.0
26.25
26.50
26.50
SIGMA-T
STN 52 Leg 1
0 0 0 0
U
0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 142

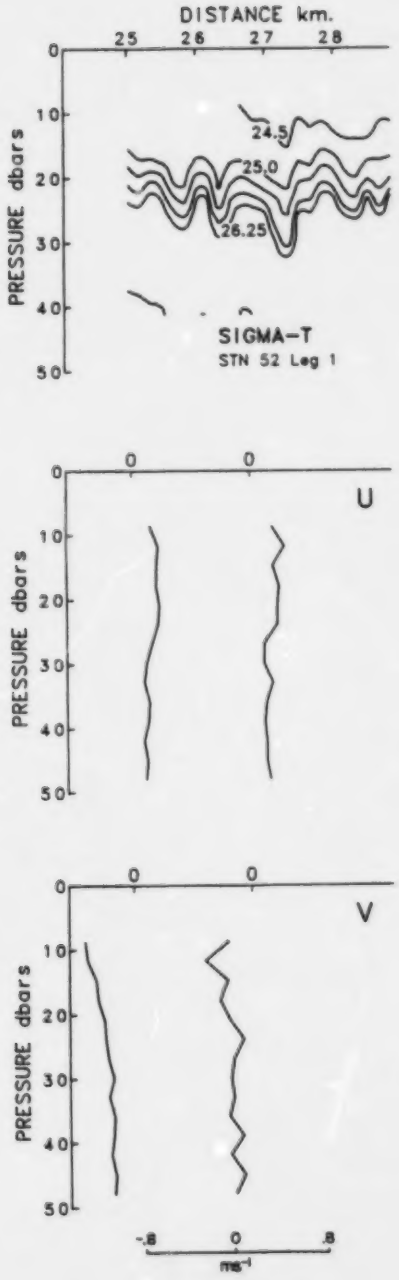

DISTANCE km.
25
26
27
28
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.25
SIGMA-T
STN 52 Leg 1
0
0
U
0
0
V
-.8
0
.8
ms⁻¹

Fig. 143

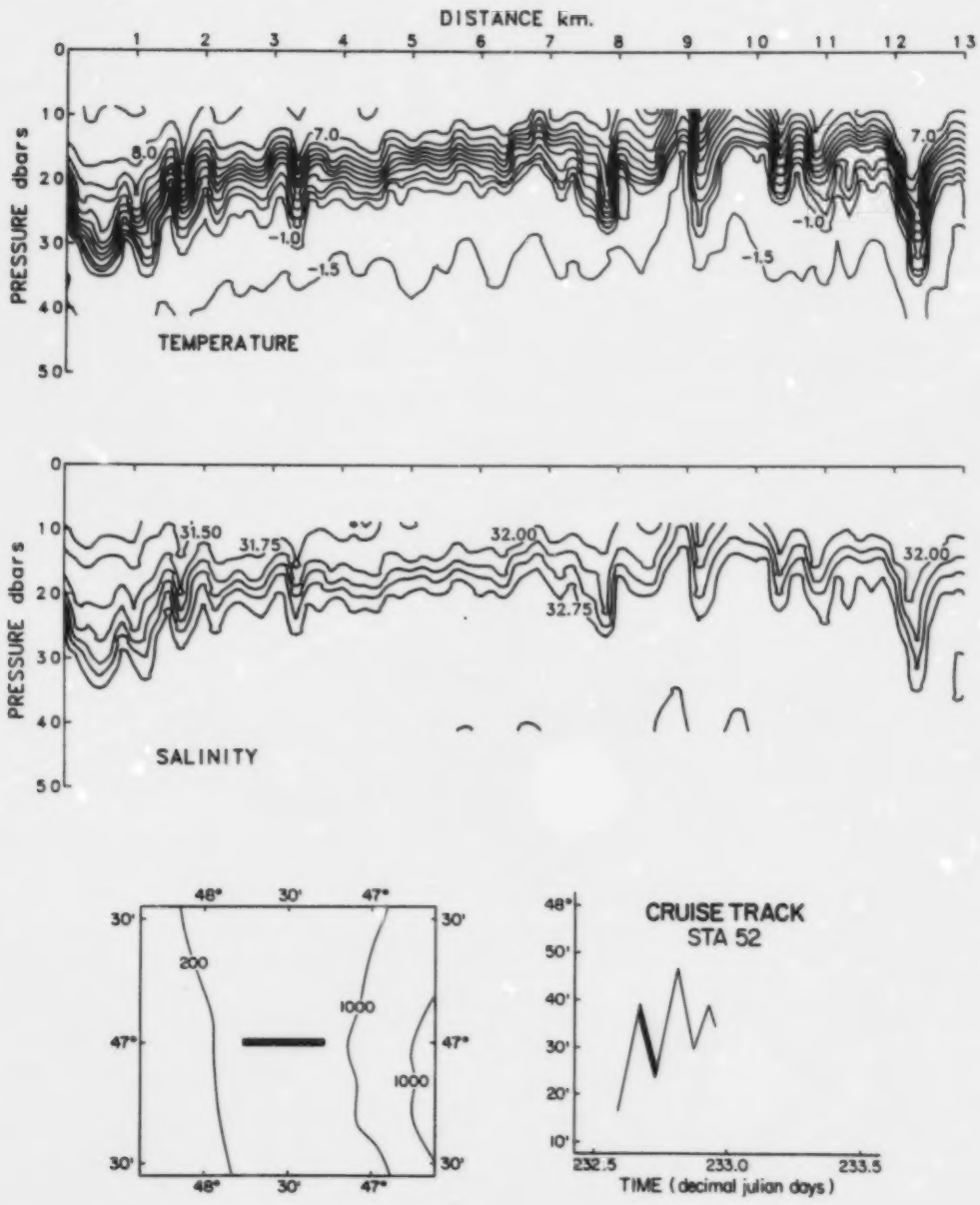

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-1.0
-1.5
-1.0
-1.5
7.0
TEMPERATURE
31.50
31.75
32.00
32.75
32.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 52
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 144

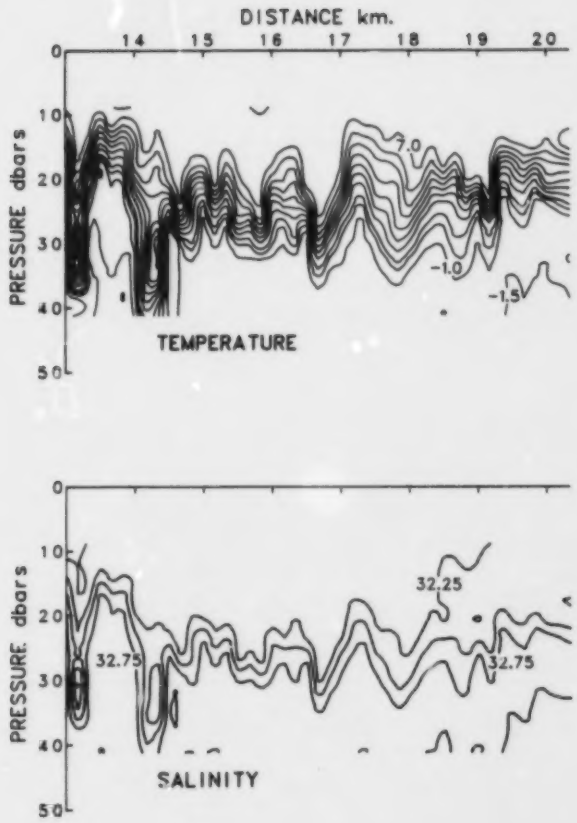

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
7.0
-1.0
-1.5
TEMPERATURE
32.25
32.75
32.75
SALINITY

Fig. 145

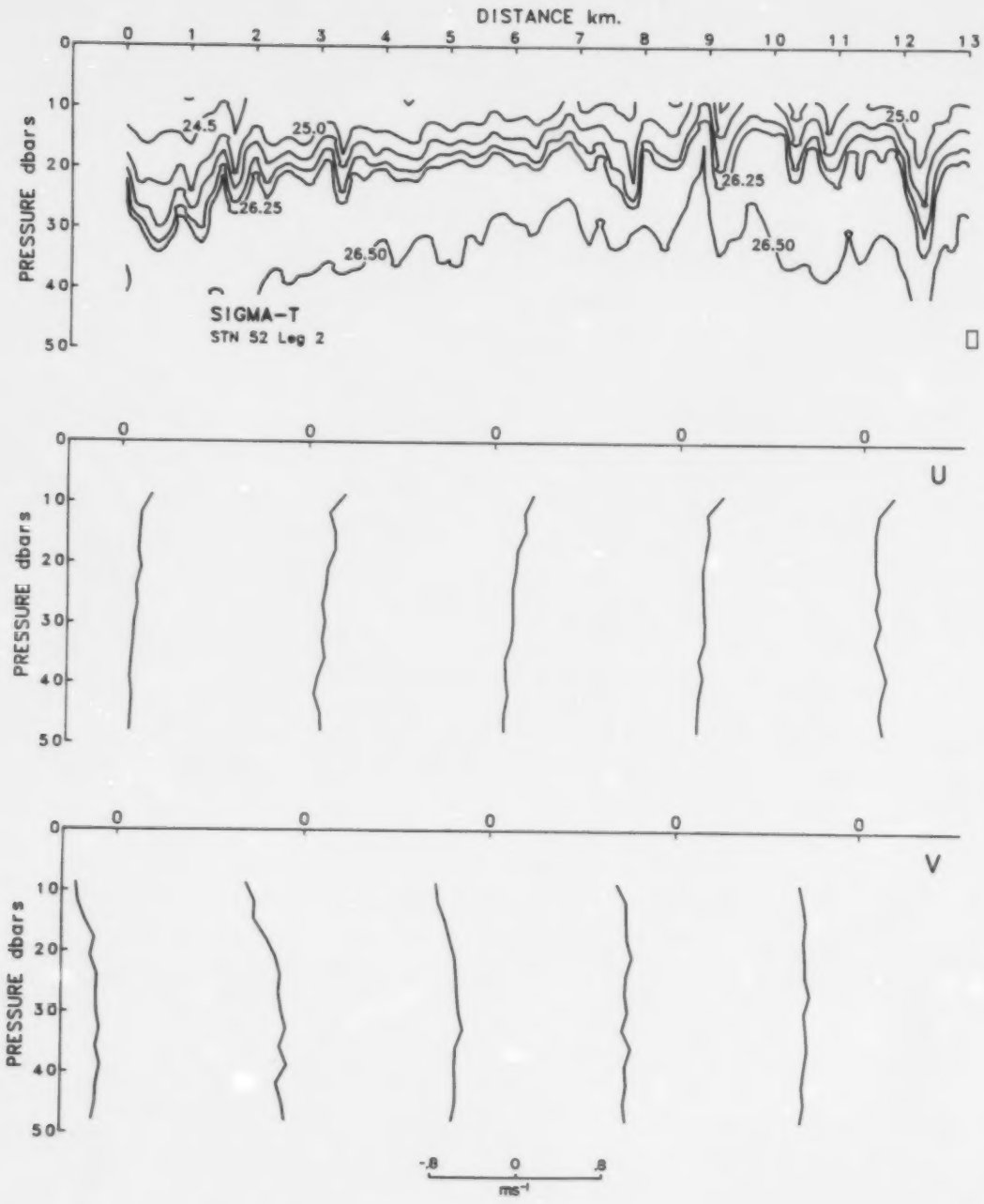

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.25
26.50
25.0
26.25
26.50
SIGMA-T
STN 52 Leg 2
0 0 0 0 0
U
PRESSURE dbars
0 10 20 30 40 50
0 0 0 0 0
V
PRESSURE dbars
0 10 20 30 40 50
-.8 0 .8
ms⁻¹

Fig. 146

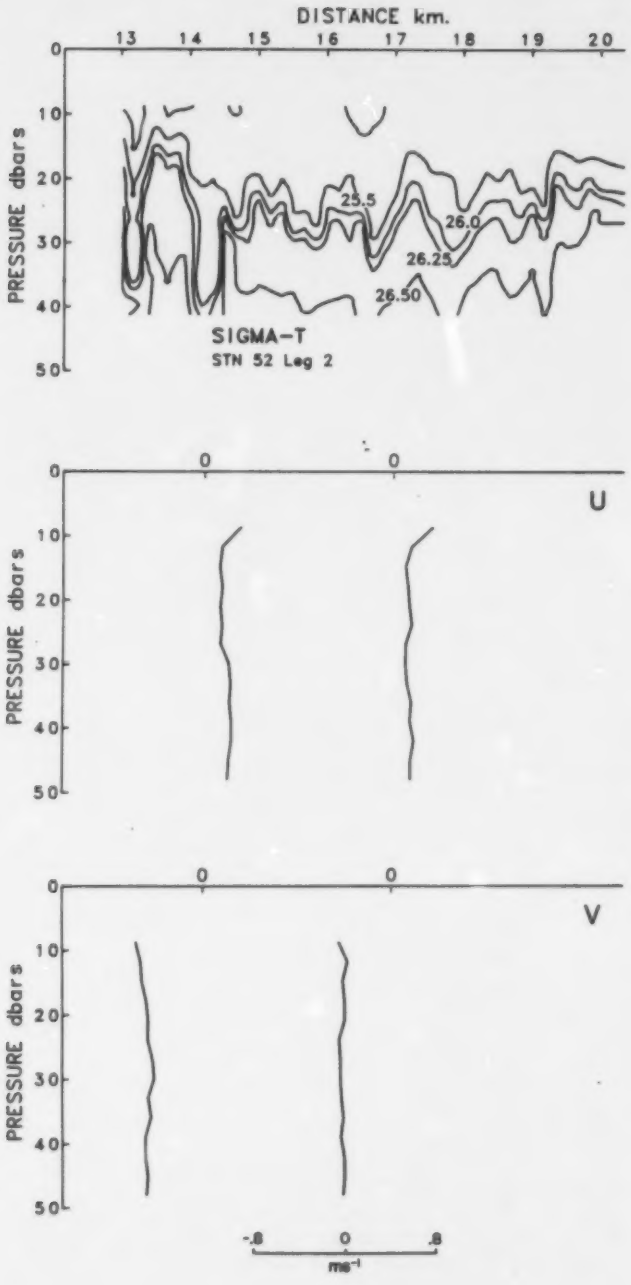

DISTANCE km.
13
14
15
16
17
18
19
20
PRESSURE dbars
0
10
20
30
40
50
25.5
26.0
26.25
26.50
SIGMA-T
STN 52 Leg 2
U
V
-.8
0
.8
ms⁻¹

Fig. 147

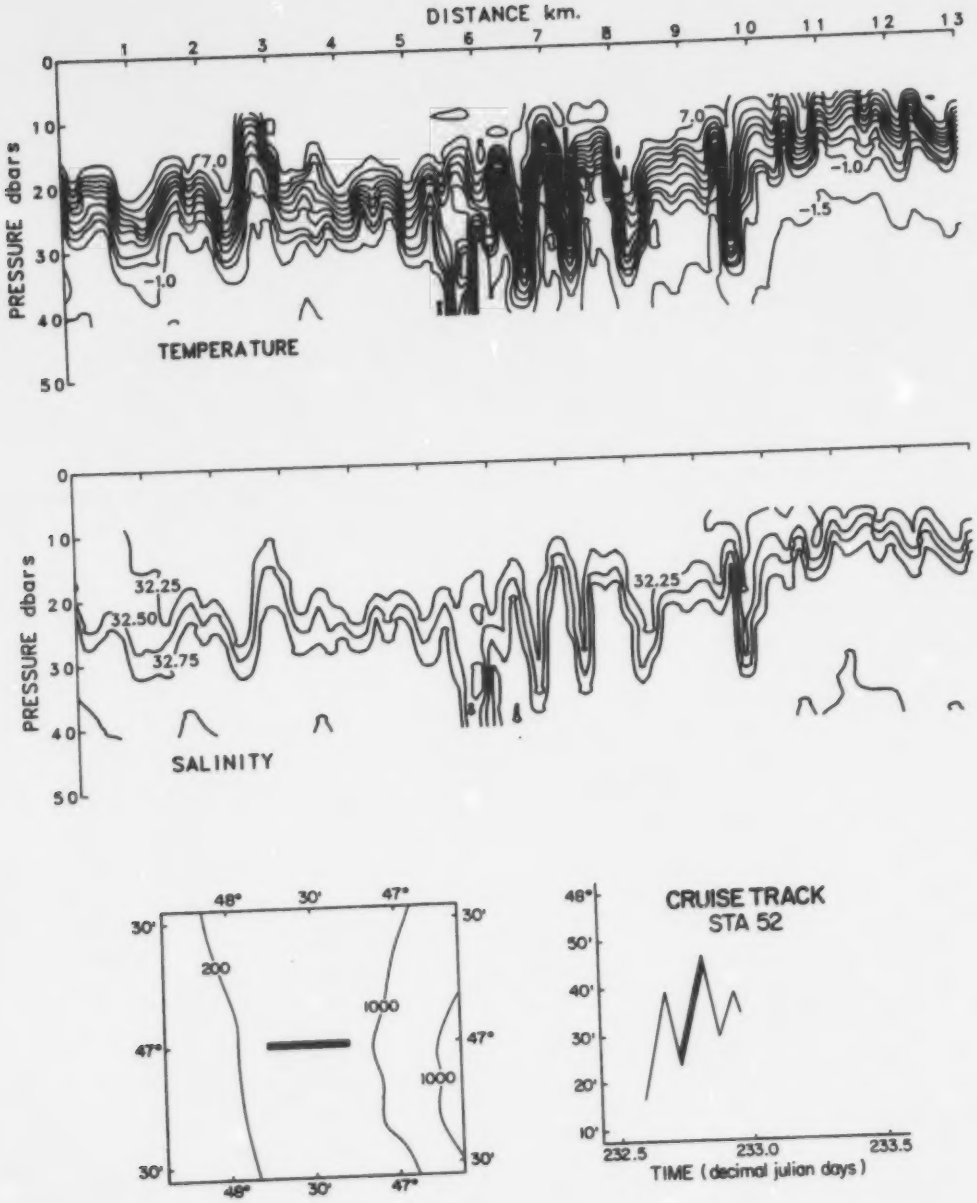

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
7.0
-1.0
-1.5
TEMPERATURE
32.25
32.50
32.75
SALINITY
48° 30' 47°
200
1000
CRUISE TRACK
STA 52
232.5 233.0 233.5
TIME (decimal julian days)

Fig. 148

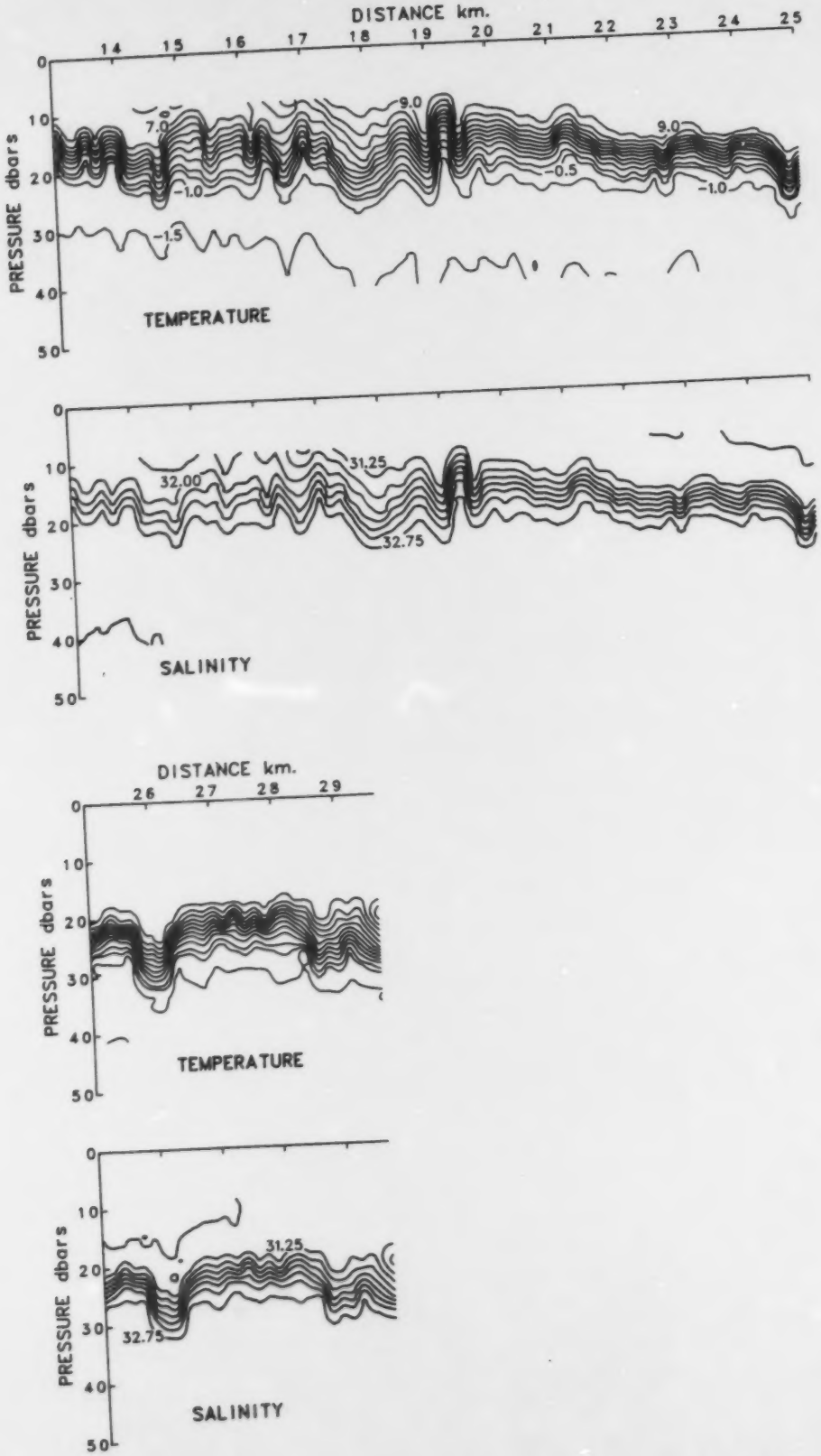

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
7.0
9.0
9.0
-0.5
-1.0
-1.0
-1.5
TEMPERATURE
32.00
31.25
32.75
SALINITY
DISTANCE km.
26 27 28 29
TEMPERATURE
31.25
32.75
SALINITY

Fig. 149

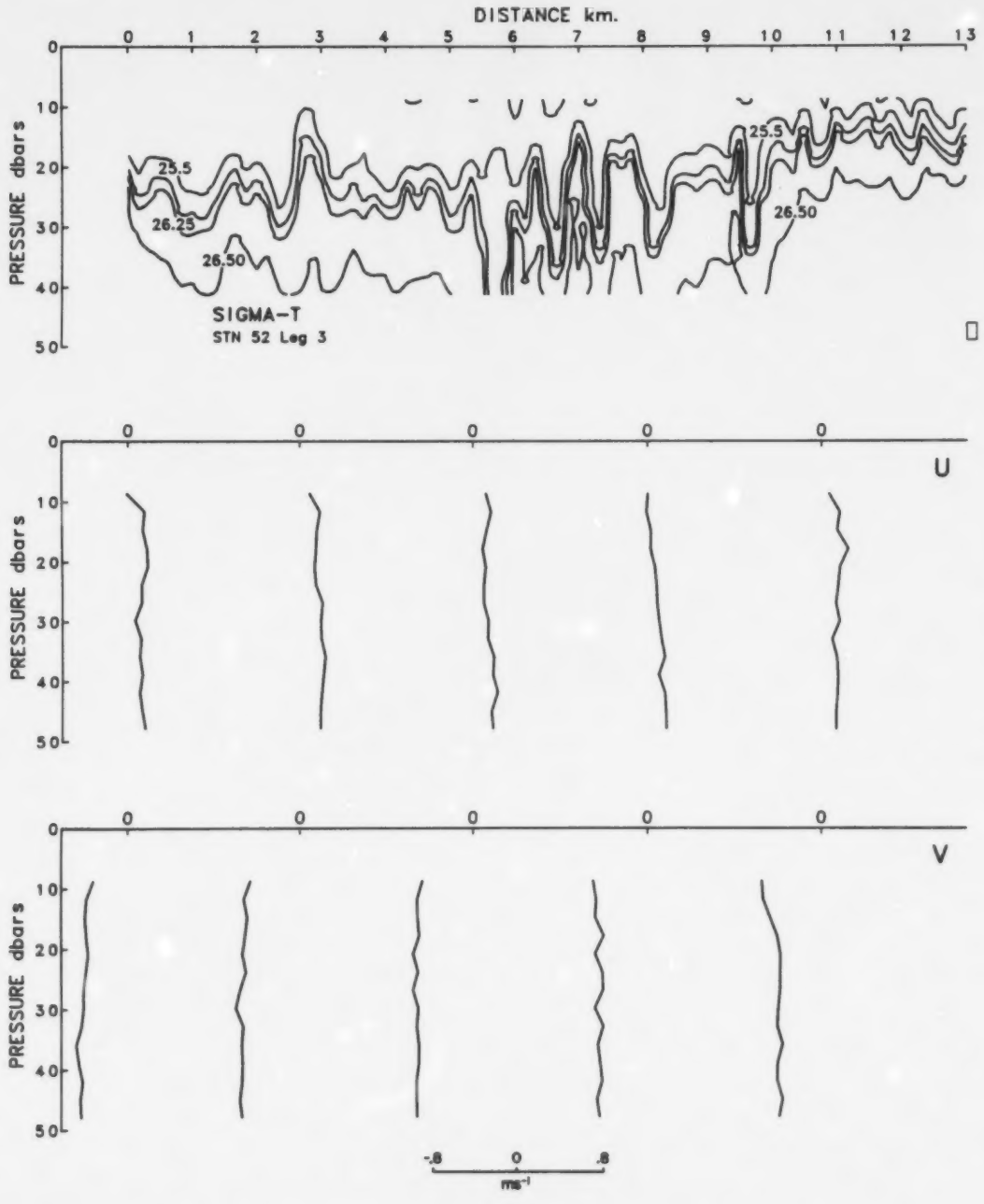

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.5
26.25
26.50
25.5
26.50
SIGMA-T
STN 52 Leg 3
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 150

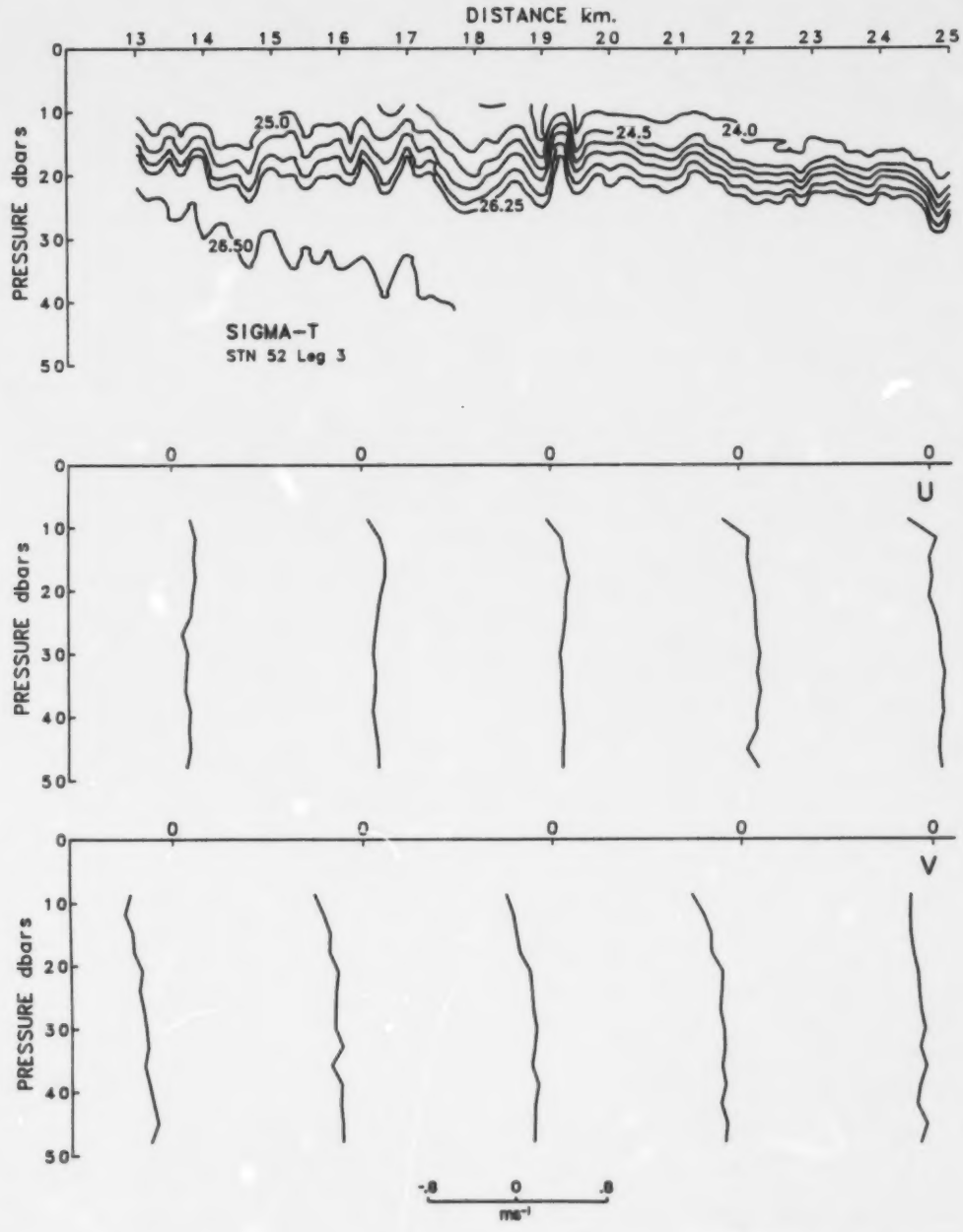

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
25.0
24.5
24.0
26.25
26.50
SIGMA-T
STN 52 Leg 3
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 151

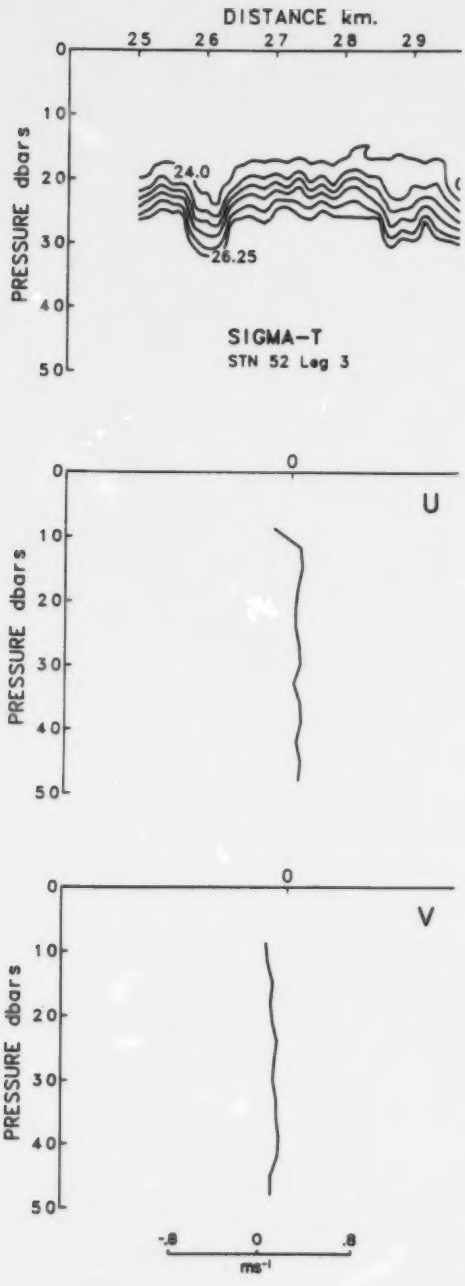

DISTANCE km.
25
26
27
28
29
0
10
20
30
40
50
PRESSURE dbars
24.0
26.25
SIGMA-T
STN 52 Leg 3
0
U
V
-.8
.8
ms⁻¹

Fig. 152

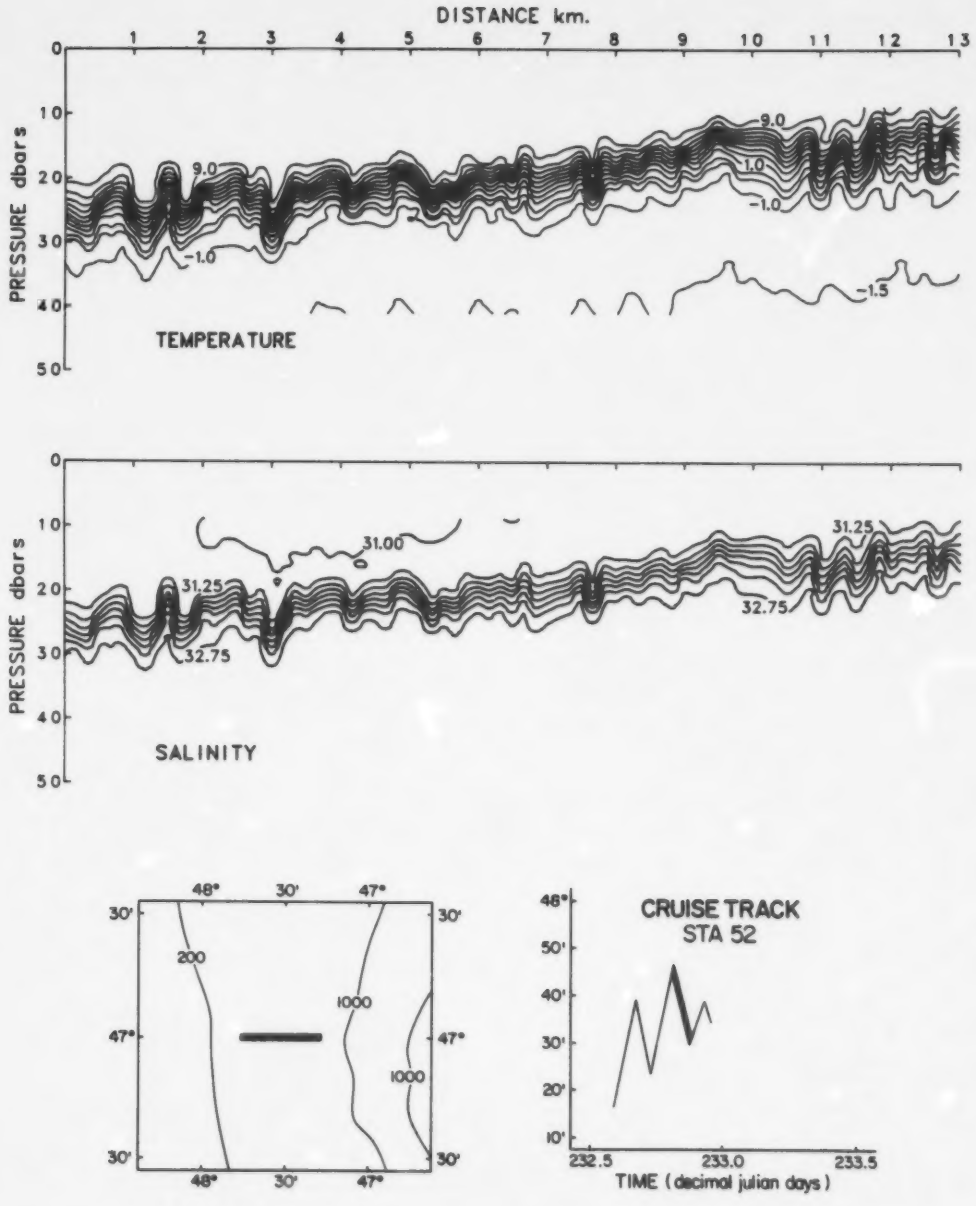

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
1.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
32.75
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 52
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 153

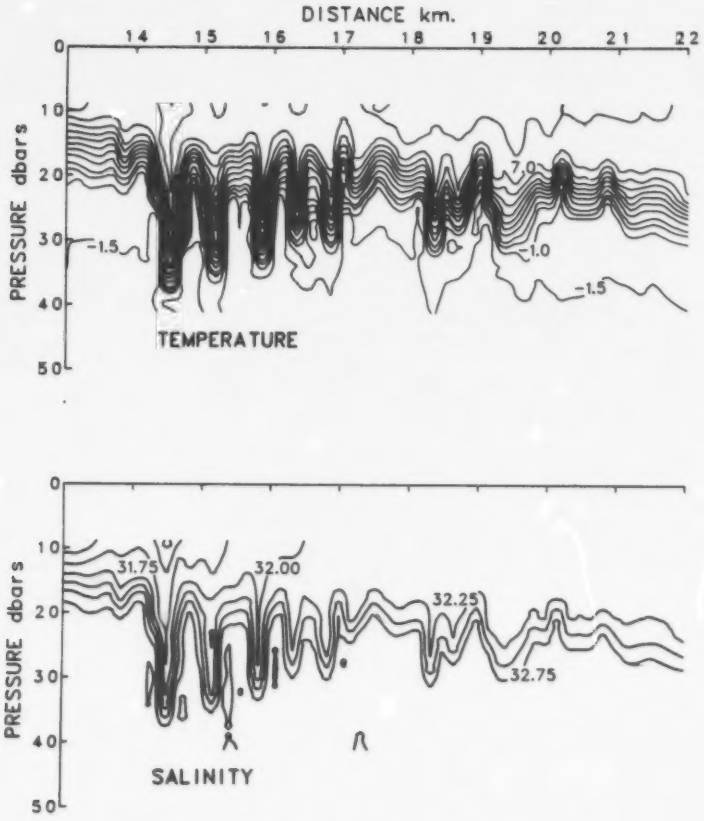

DISTANCE km.
14
15
16
17
18
19
20
21
22
PRESSURE dbars
0
10
20
30
40
50
7.0
-1.5
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.25
32.75
SALINITY

Fig. 154

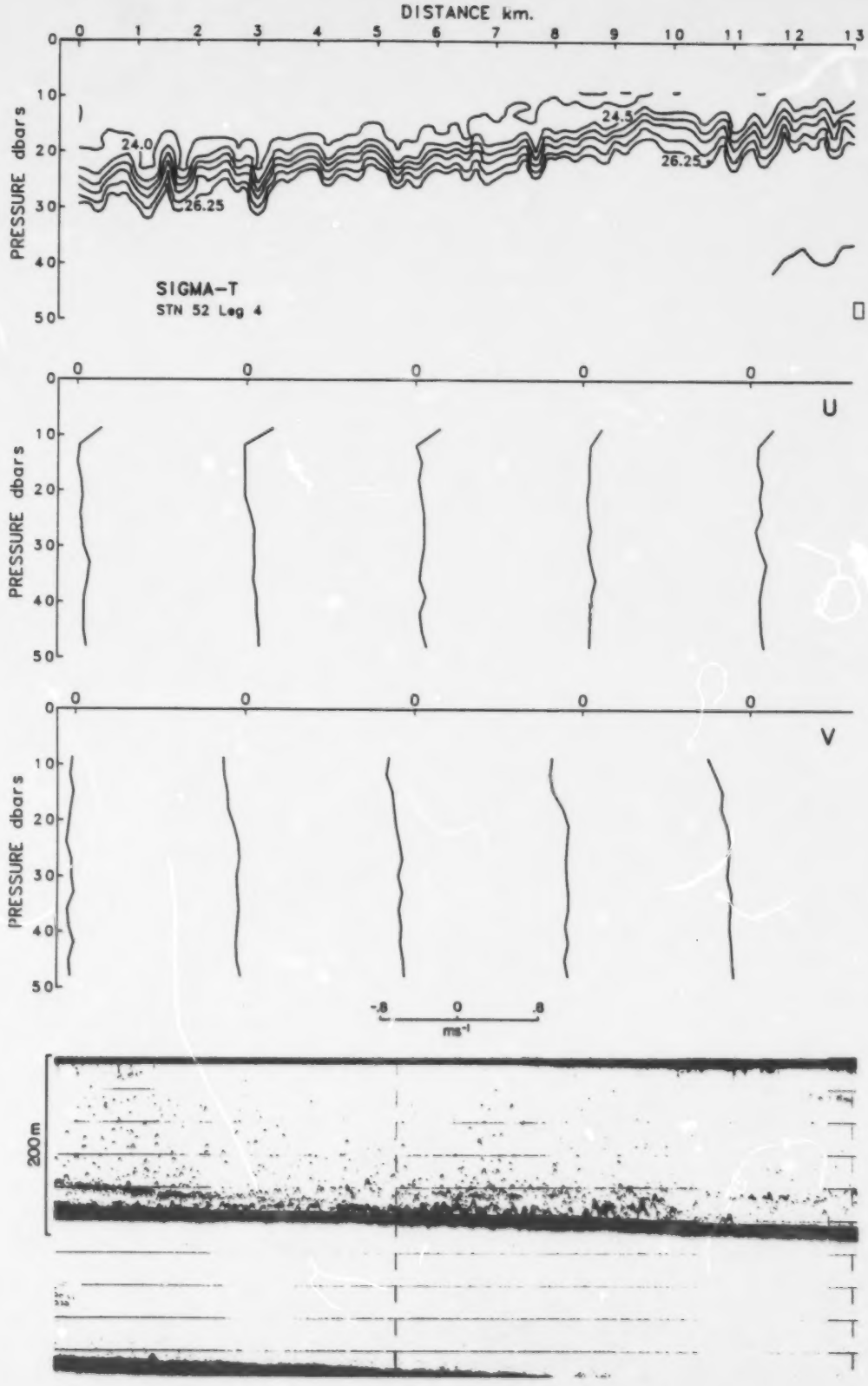

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
26.25
26.25
SIGMA-T
STN 52 Leg 4
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 155

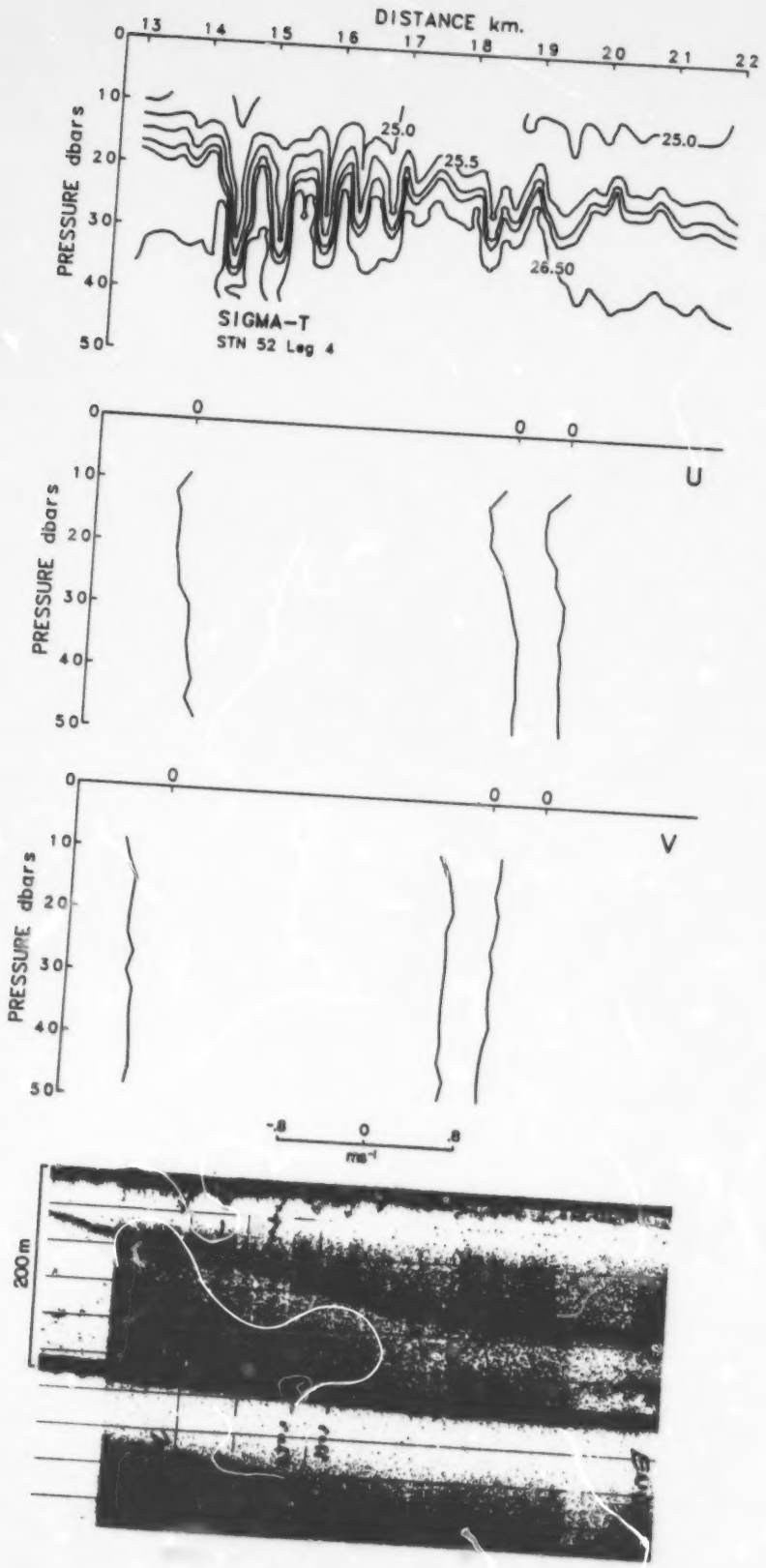

DISTANCE km.
0 13 14 15 16 17 18 19 20 21 22
PRESSURE dbars
10
20
30
40
50
25.0
25.5
25.0
26.50
SIGMA-T
STN 52 Leg 4
0 0 0
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 156

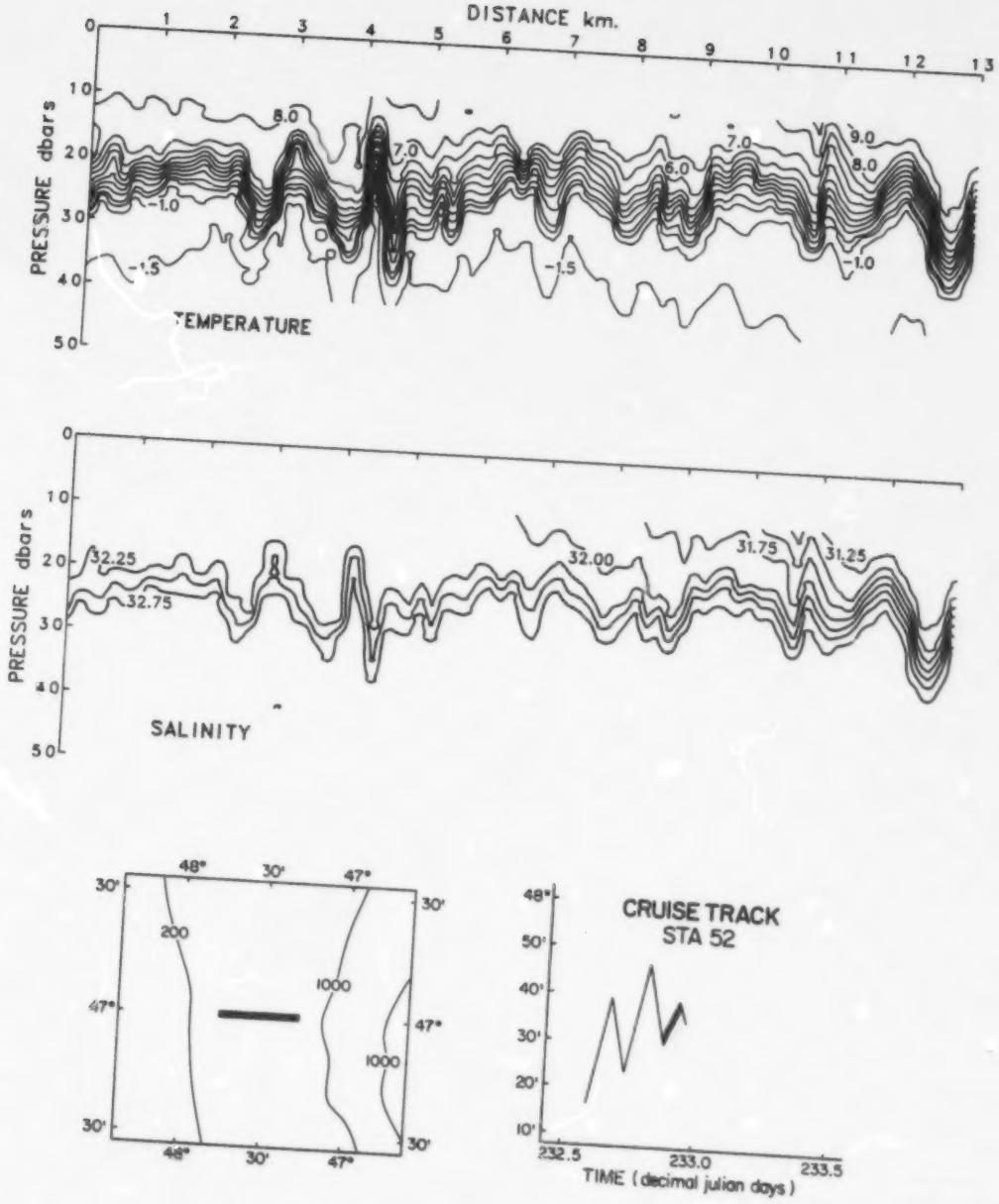

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
8.0
7.0
6.0
7.0
9.0
8.0
-1.0
-1.5
-1.5
-1.0
TEMPERATURE
0 10 20 30 40 50
PRESSURE dbars
32.25
32.75
32.00
31.75
31.25
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 52
48° 50' 40' 30' 20' 10'
232.5 233.0 233.5
TIME (decimal julian days)

Fig. 157

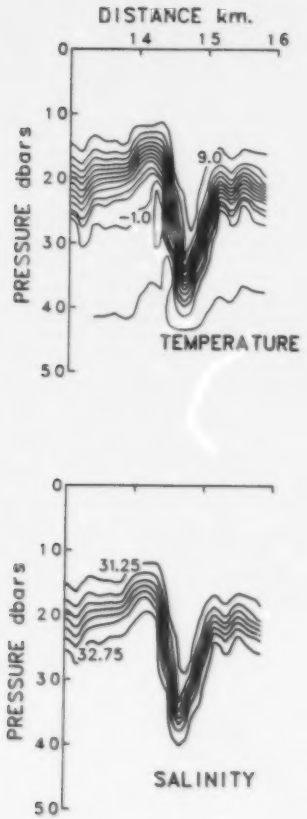

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
9.0
1.0
TEMPERATURE
31.25
32.75
SALINITY

Fig. 158

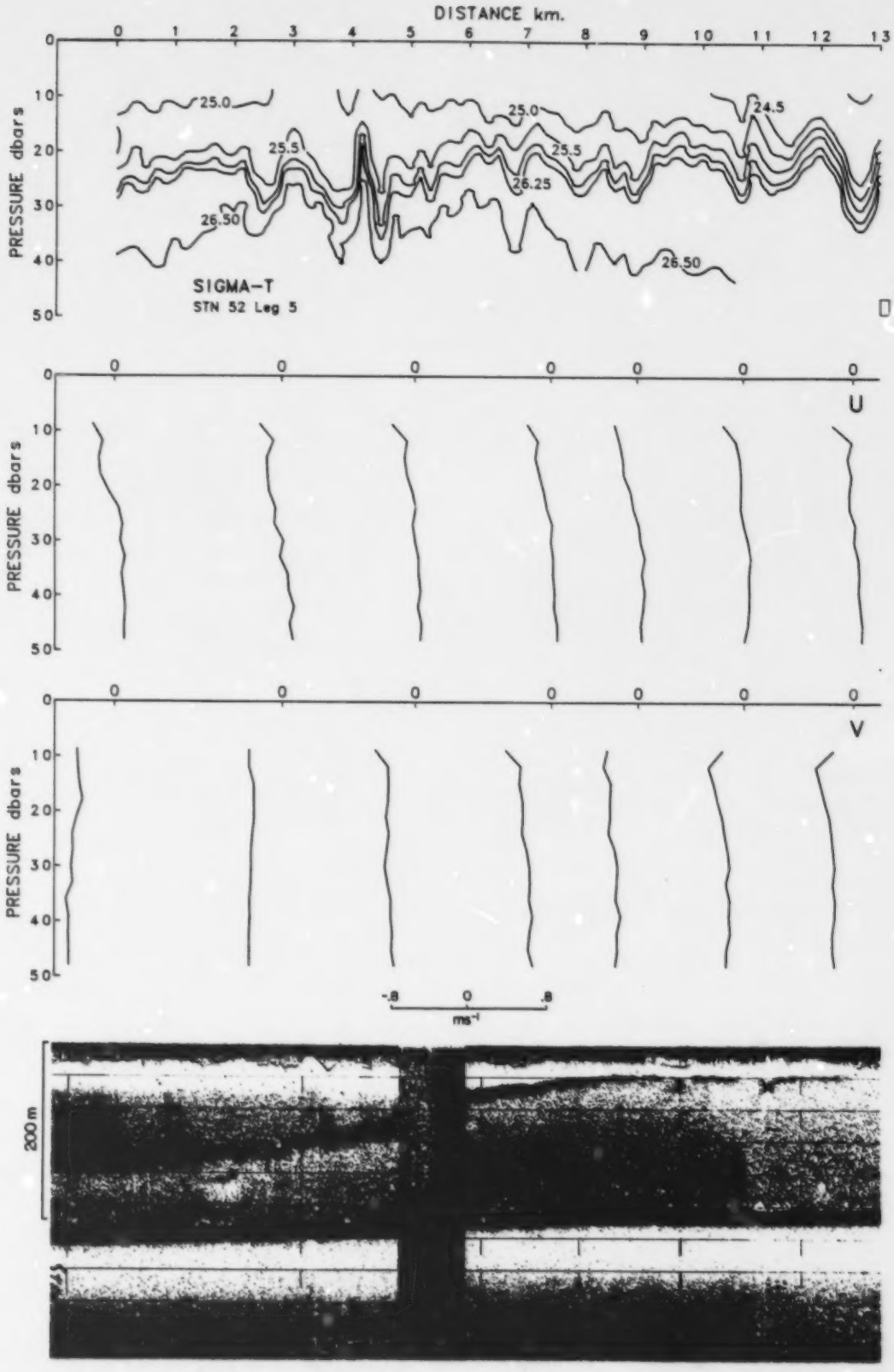

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.50
25.0
25.5
26.25
24.5
26.50
SIGMA-T
STN 52 Leg 5
U
V
-.8 0 .8
ms⁻¹
200 m

Fig. 159

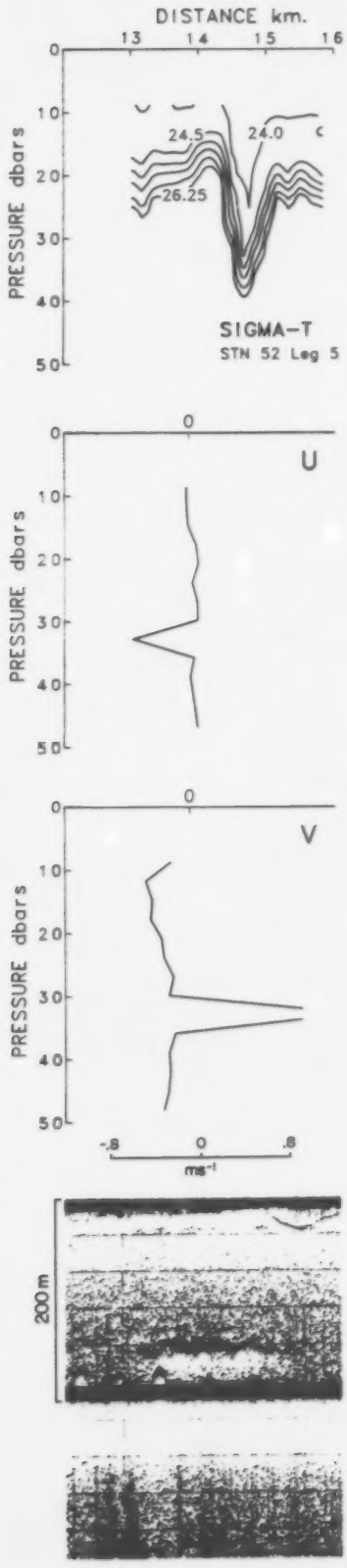

DISTANCE km.
13
14
15
16
PRESSURE dbars
24.5
24.0
26.25
SIGMA-T
STN 52 Leg 5
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 160

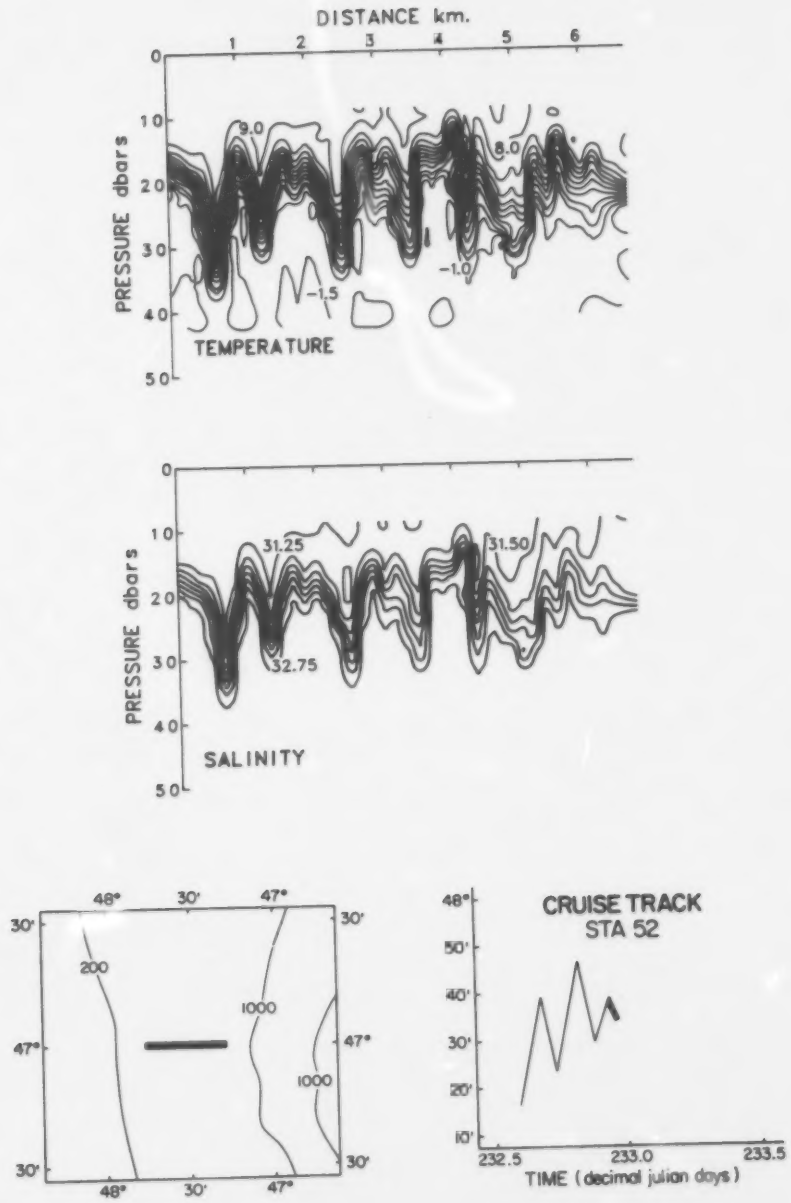

DISTANCE km.
1
2
3
4
5
6
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.25
31.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 52
50'
40'
20'
10'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 161

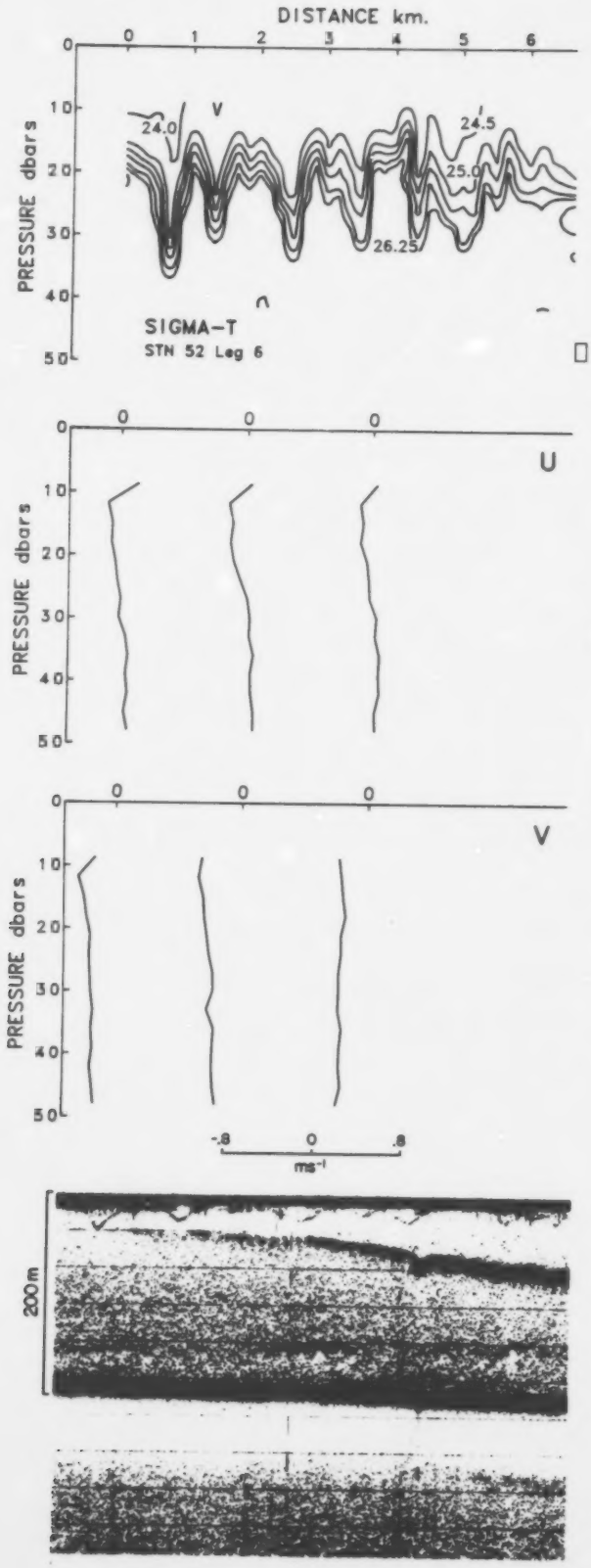

DISTANCE km.
0 1 2 3 4 5 6
PRESSURE dbars
0 10 20 30 40 50
V
24.0
24.5
25.0
26.25
SIGMA-T
STN 52 Leg 6
U
V
0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 162

Figures 163-196

BATFISH station 52; 9 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

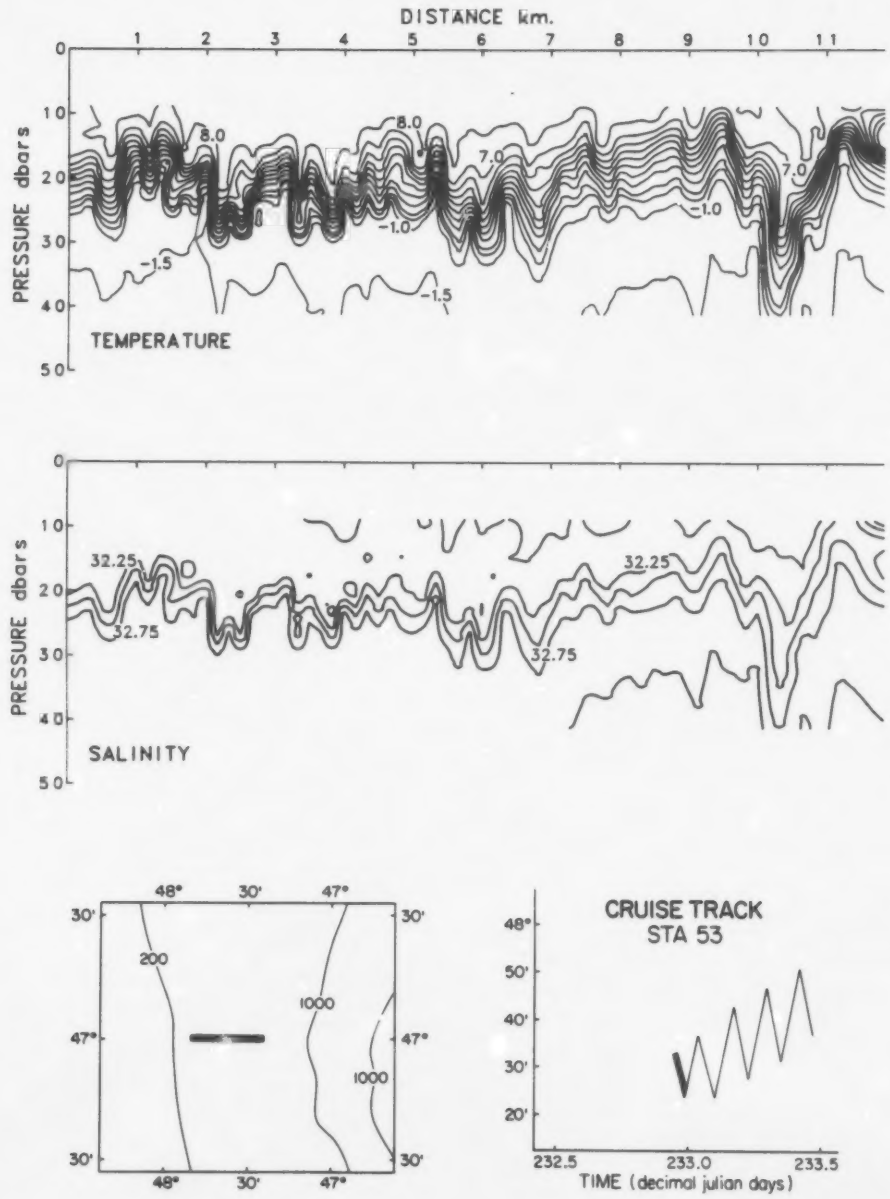

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11
0
10
20
30
40
50
PRESSURE dbars
8.0
8.0
7.0
7.0
-1.0
-1.0
-1.5
-1.5
TEMPERATURE
32.25
32.25
32.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 53
50'
40'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 163

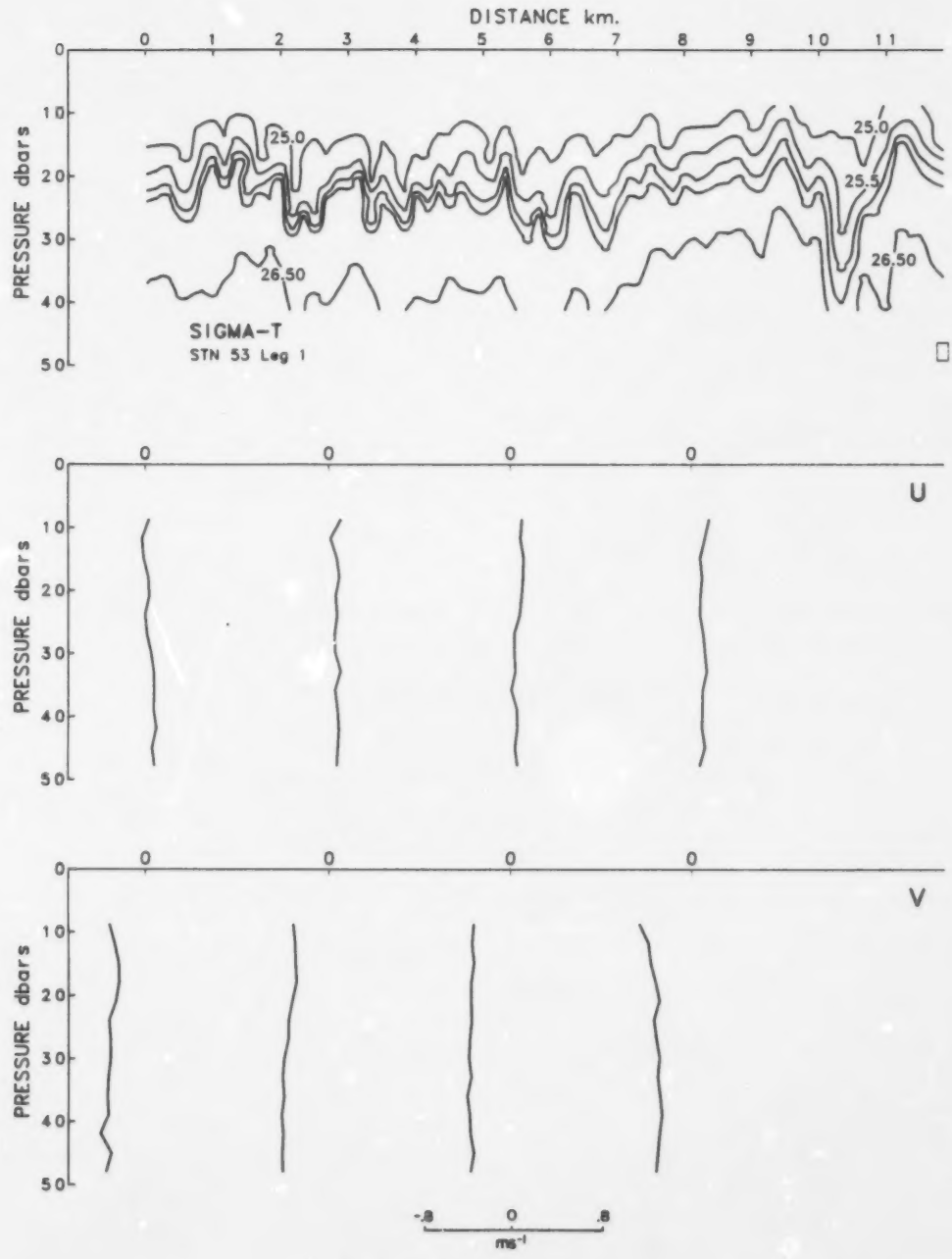

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.50
SIGMA-T
STN 53 Leg 1
U
V
0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 164

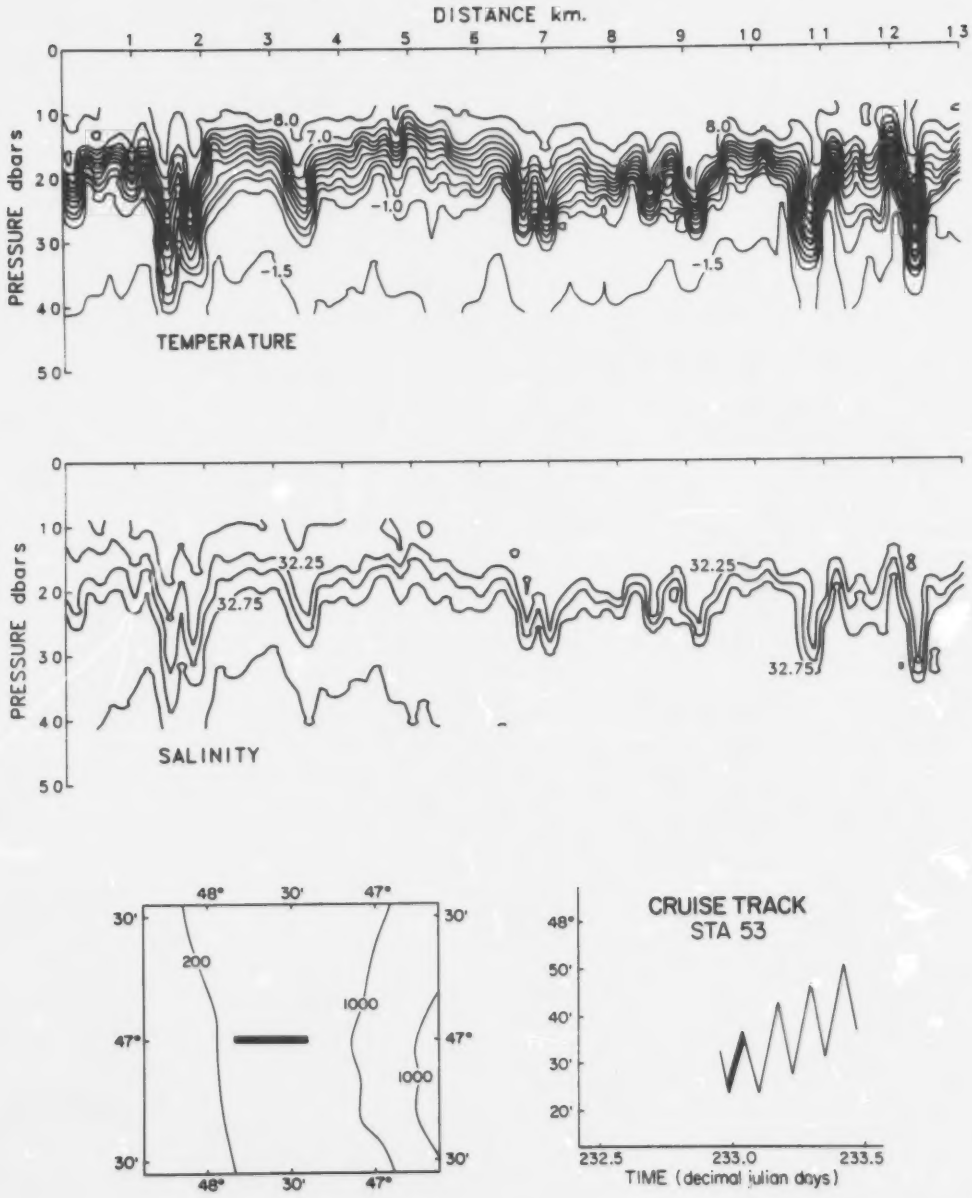

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-1.0
-1.5
8.0
-1.5
TEMPERATURE
32.25
32.75
32.25
32.75
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 53
48°
50'
40'
30'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 165

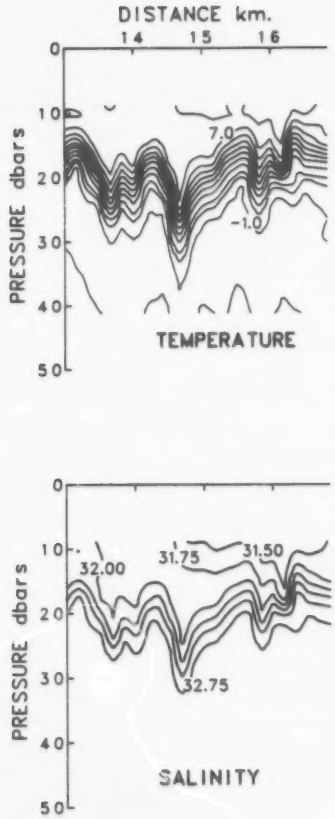

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
7.0
-1.0
TEMPERATURE
31.75
31.50
32.00
32.75
SALINITY

Fig. 166

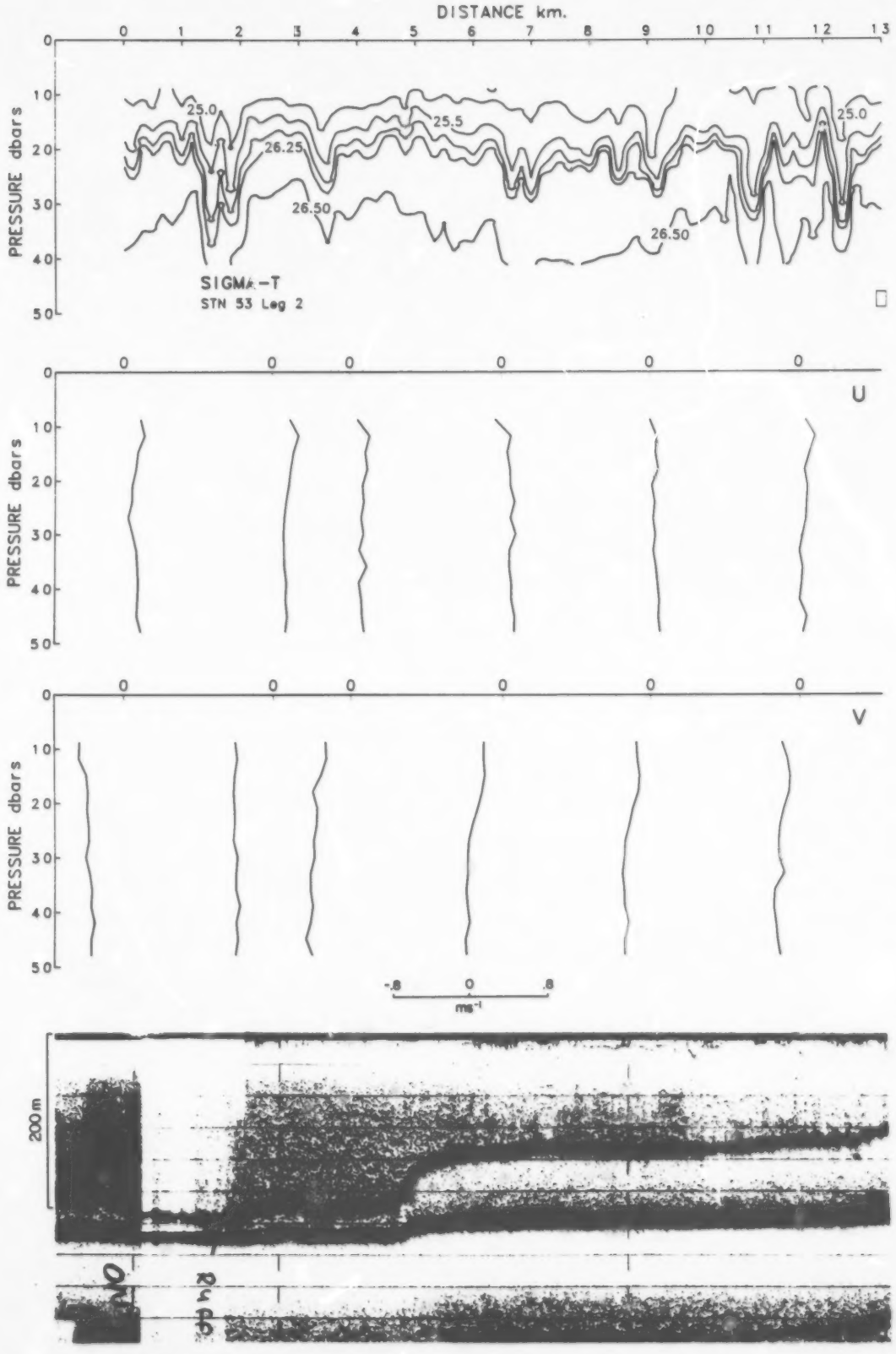

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
25.5
26.25
26.50
25.0
26.50
SIGMA-T
STN 53 Leg 2
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 167

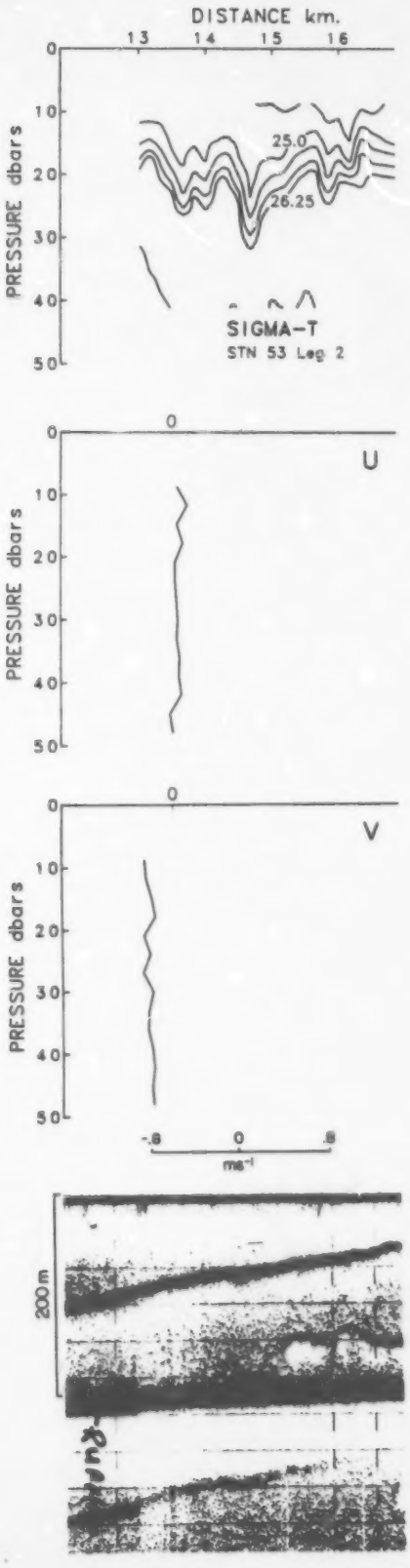

DISTANCE km.
13
14
15
16
PRESSURE dbars
25.0
26.25
SIGMA-T
STN 53 Leg 2
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 168

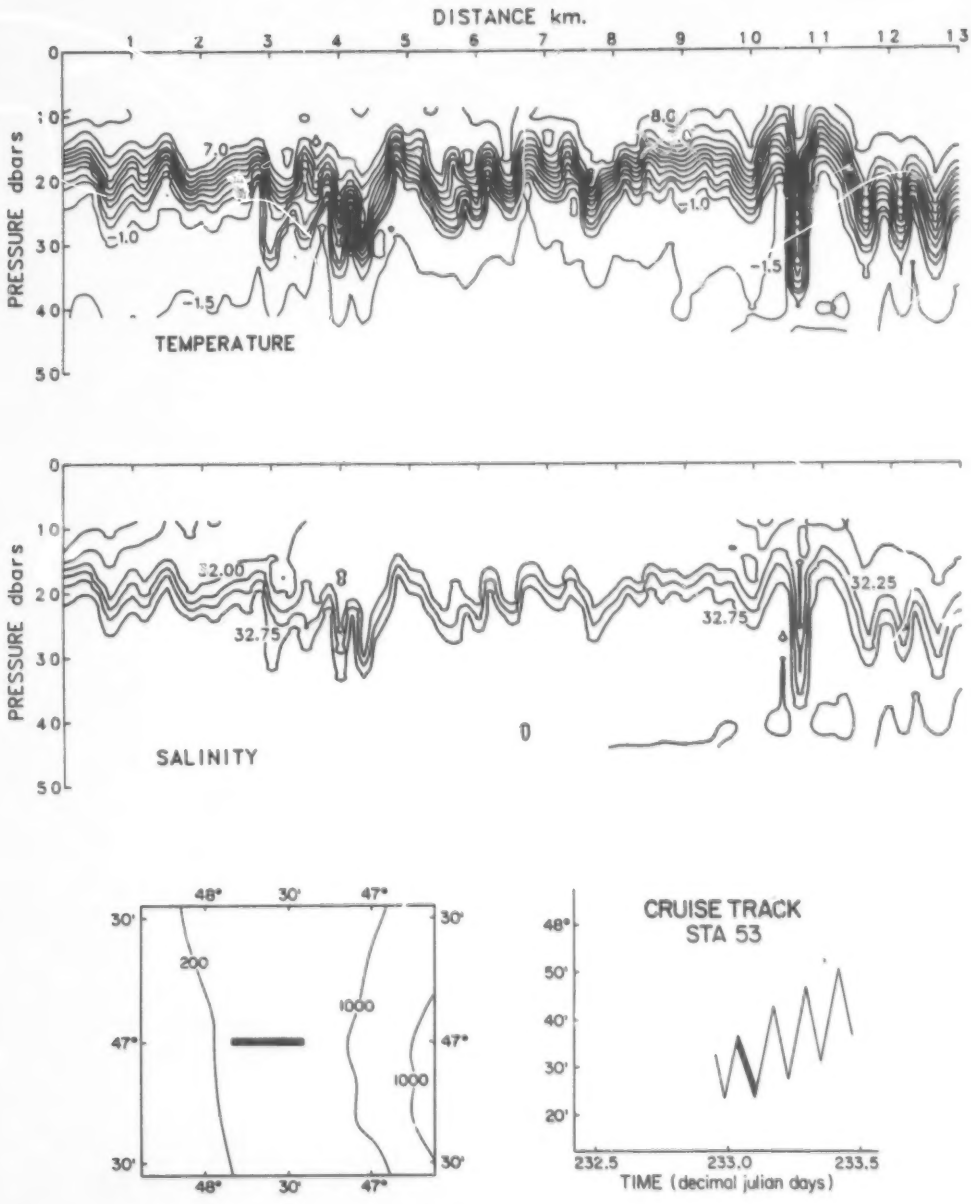

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
7.0
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
CRUISE TRACK
STA 53
48° 50' 40' 30' 20'
232.5 233.0 233.5
TIME (decimal julian days)

Fig. 169

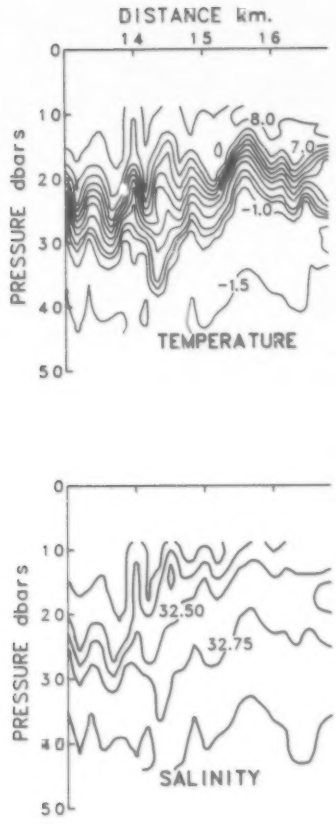

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.50
32.75
SALINITY

Fig. 170

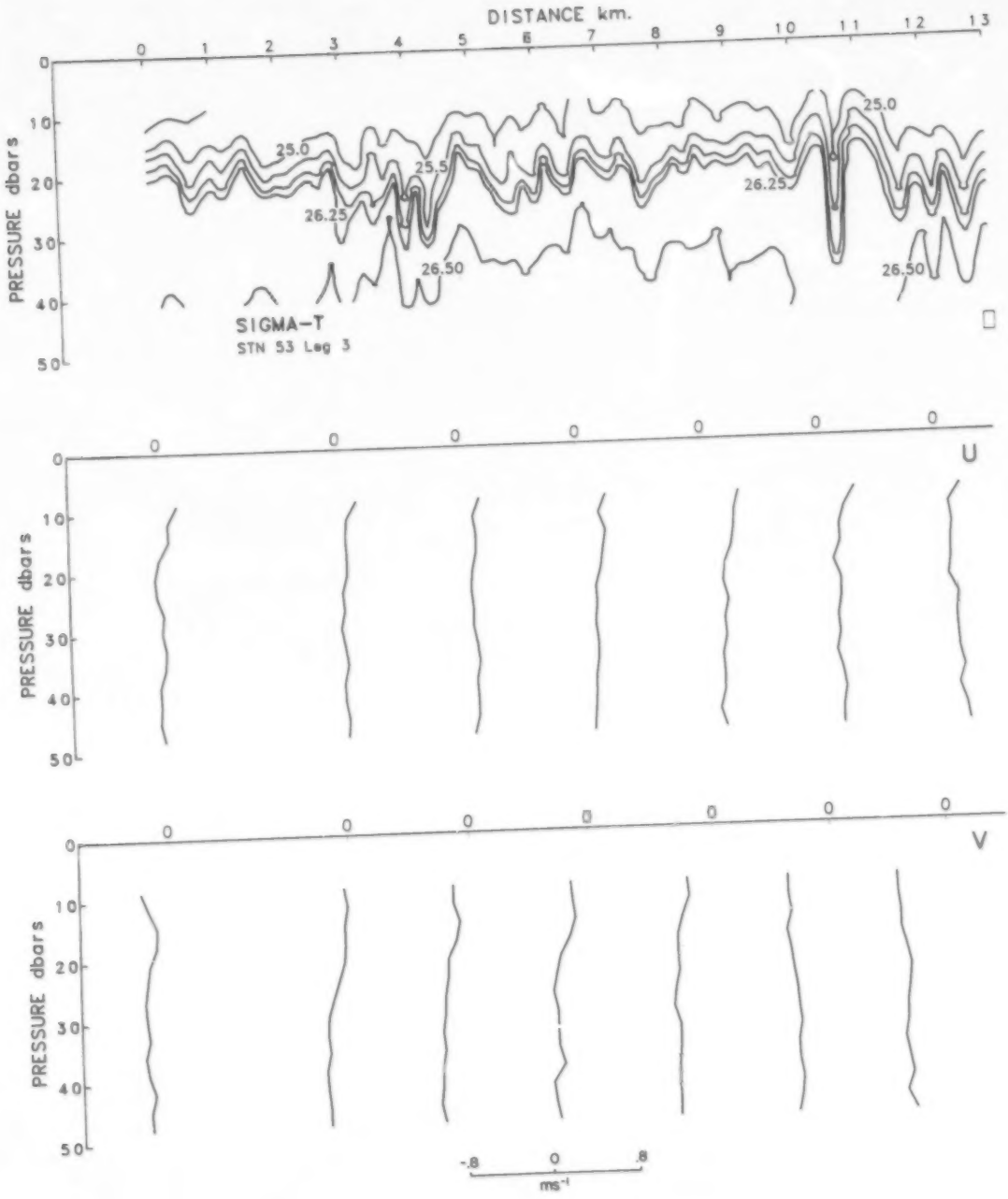

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.25
26.50
SIGMA-T
STN 53 Leg 3
U
V
-.8 0 .8
ms⁻¹

Fig. 171

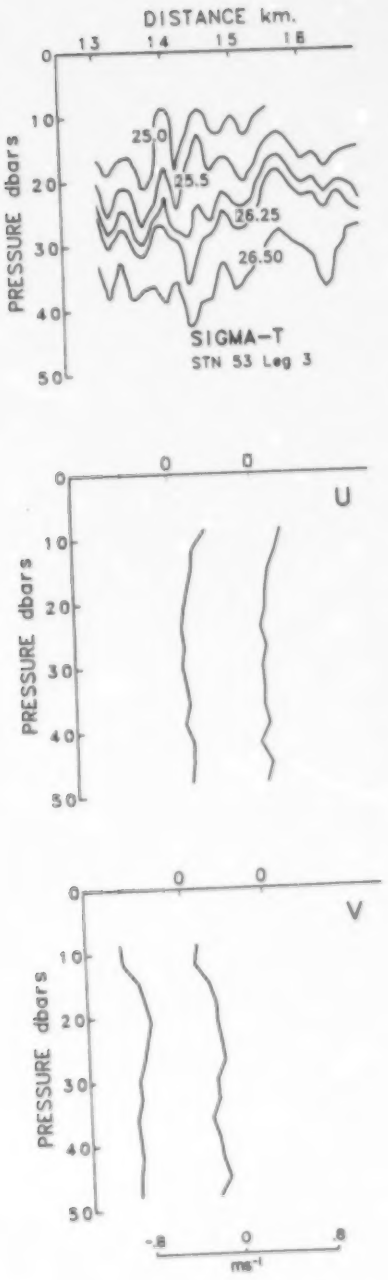

DISTANCE km.
13
14
15
16
0
10
20
30
40
50
PRESSURE dbars
25.0
25.5
26.25
26.50
SIGMA-T
STN 53 Leg 3
0
0
U
PRESSURE dbars
0
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 172

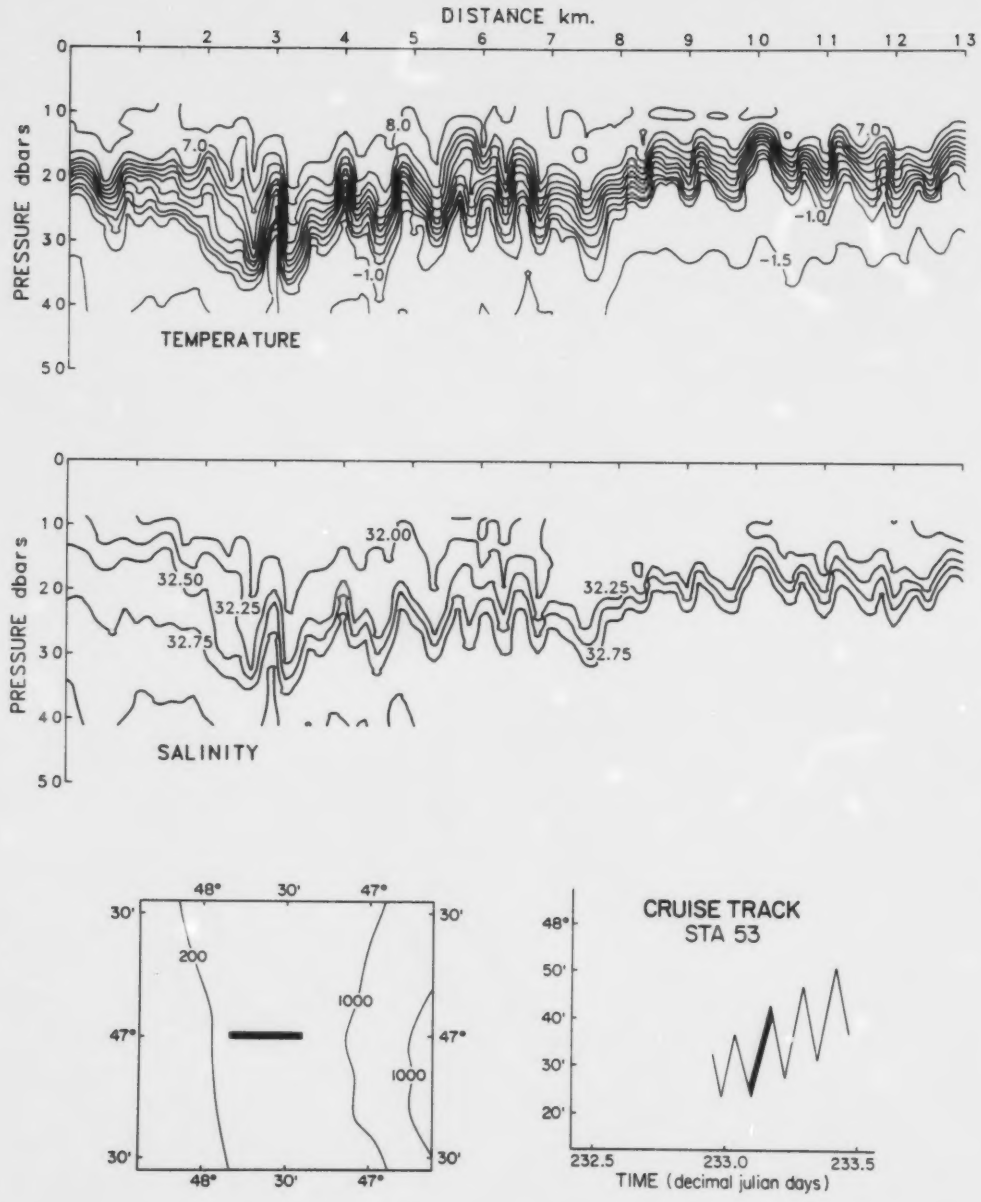

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
7.0
8.0
7.0
-1.0
-1.0
-1.5
TEMPERATURE
32.00
32.50
32.25
32.25
32.75
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 53
48° 50' 40' 30' 20'
232.5 233.0 233.5
TIME (decimal julian days)

Fig. 173

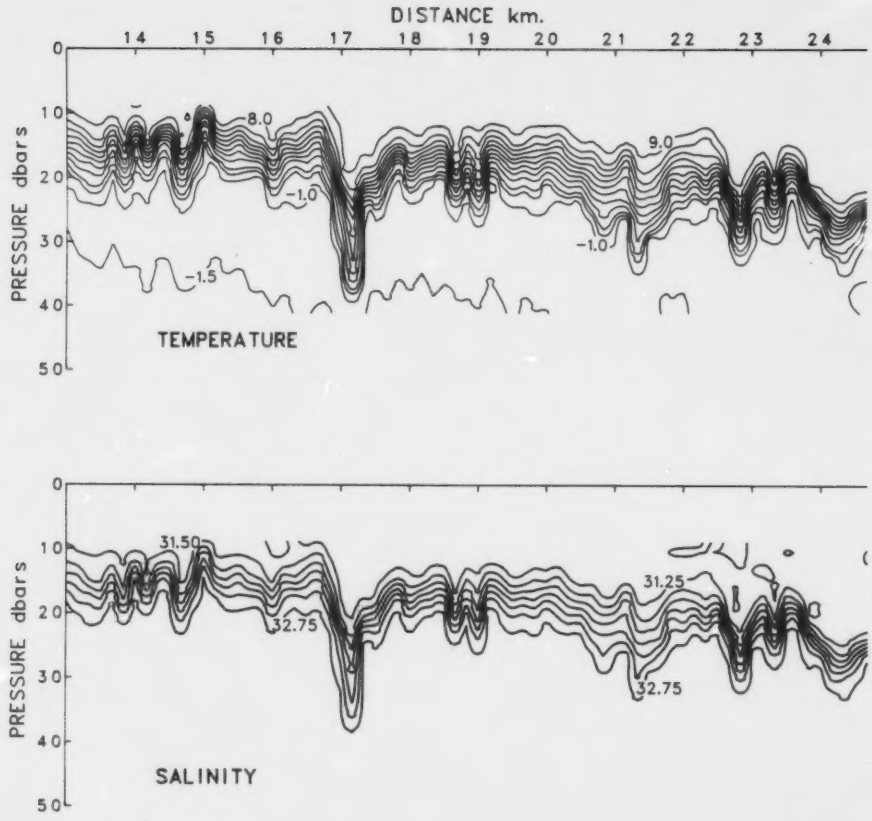

DISTANCE km.
14
15
16
17
18
19
20
21
22
23
24
0
10
20
30
40
50
PRESSURE dbars
8.0
9.0
-1.0
-1.0
-1.5
TEMPERATURE
31.50
31.25
32.75
32.75
SALINITY

Fig. 174

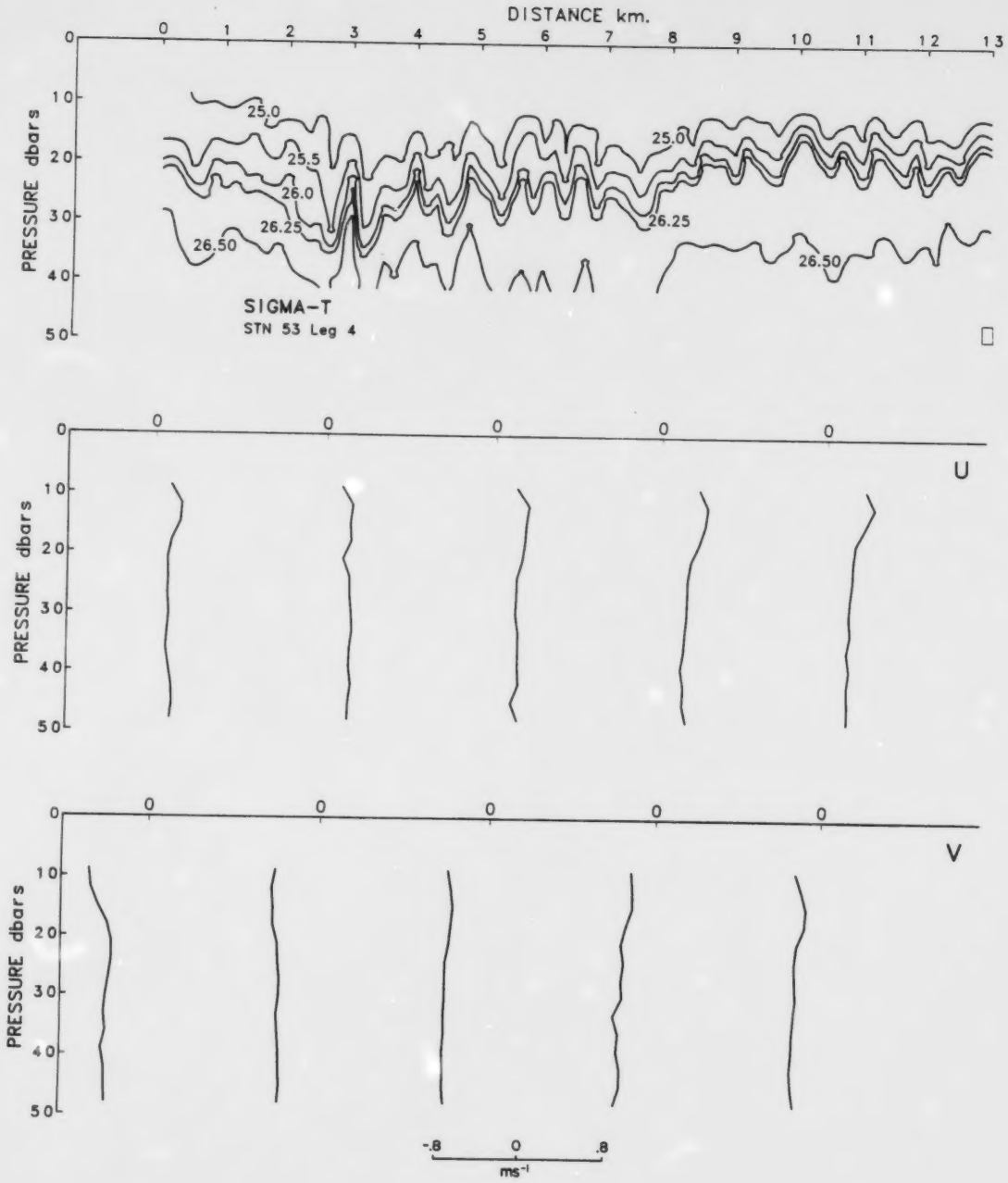

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
25.0
26.25
26.50
SIGMA-T
STN 53 Leg 4
U
V
-.8 0 .8
ms⁻¹

Fig. 175

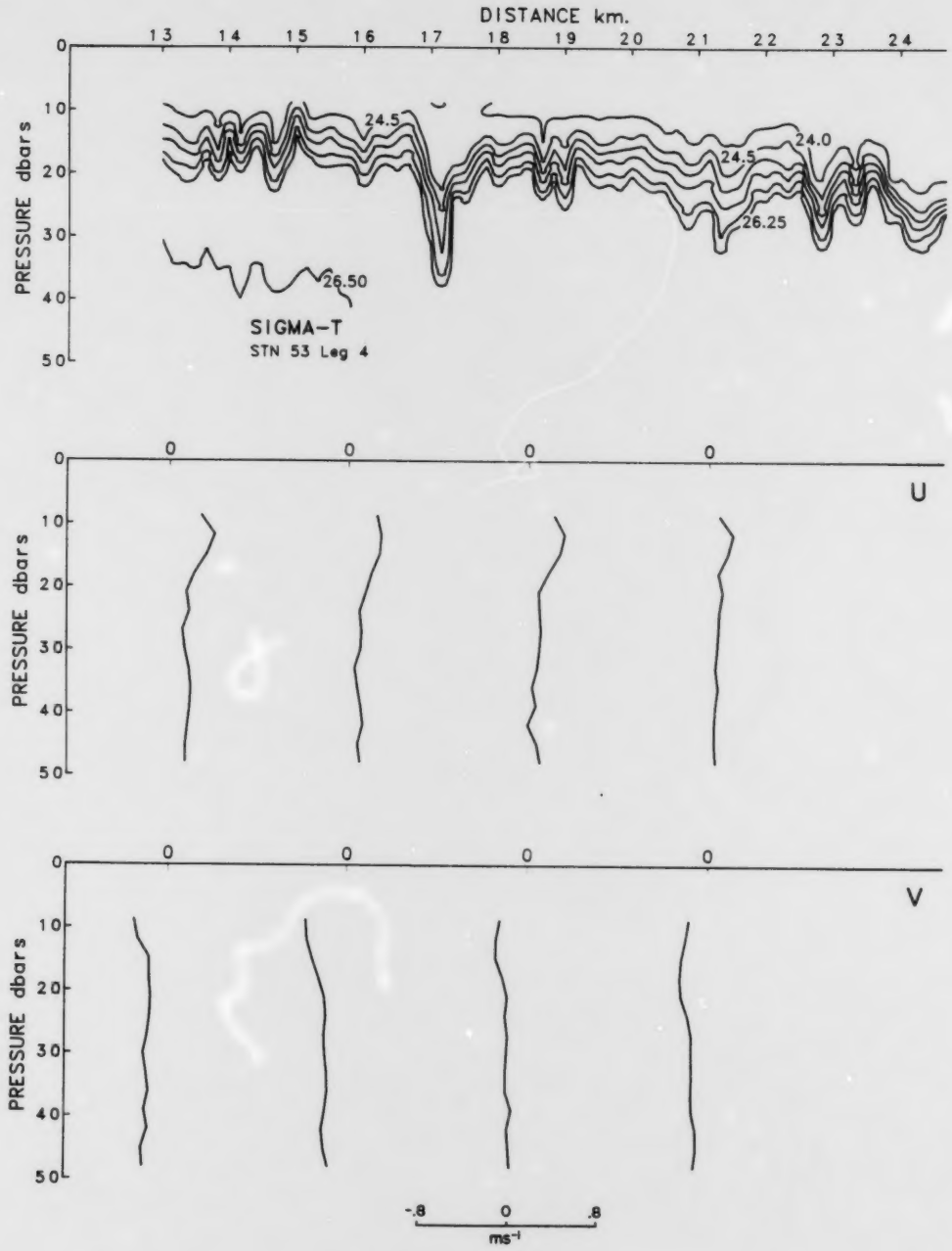

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24
PRESSURE dbars
0 10 20 30 40 50
24.5
24.5
24.0
26.25
26.50
SIGMA-T
STN 53 Leg 4
0 0 0 0
U
0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 176

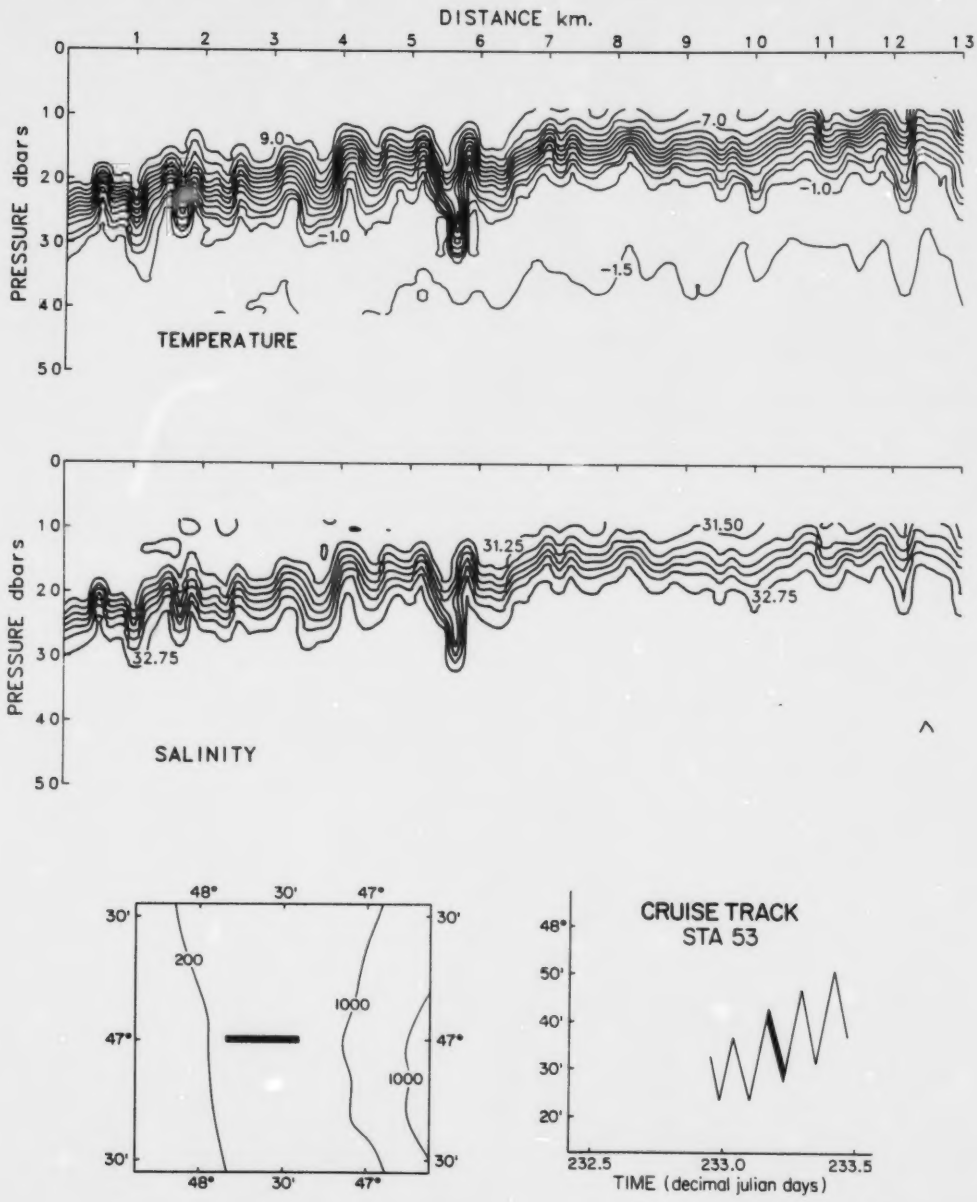

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
7.0
-1.0
-1.0
-1.5
TEMPERATURE
31.25
31.50
32.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 53
50'
40'
30'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 177

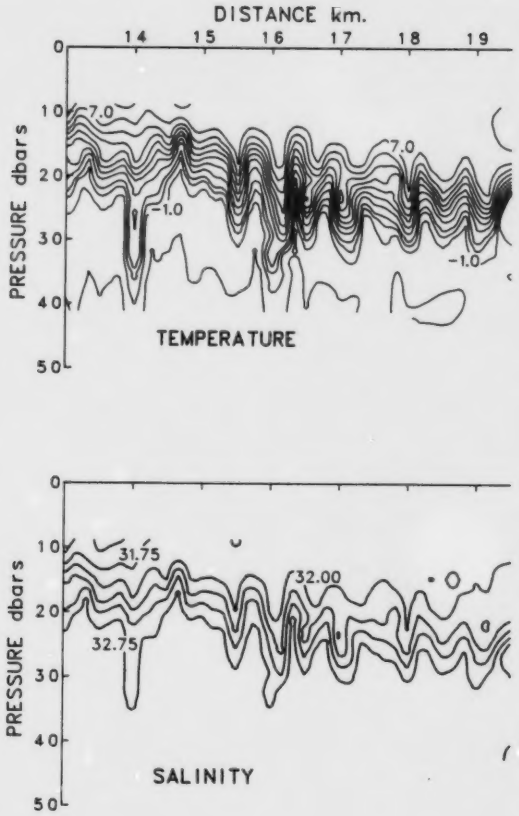

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
7.0
-1.0
7.0
-1.0
TEMPERATURE
31.75
32.00
32.75
SALINITY

Fig. 178

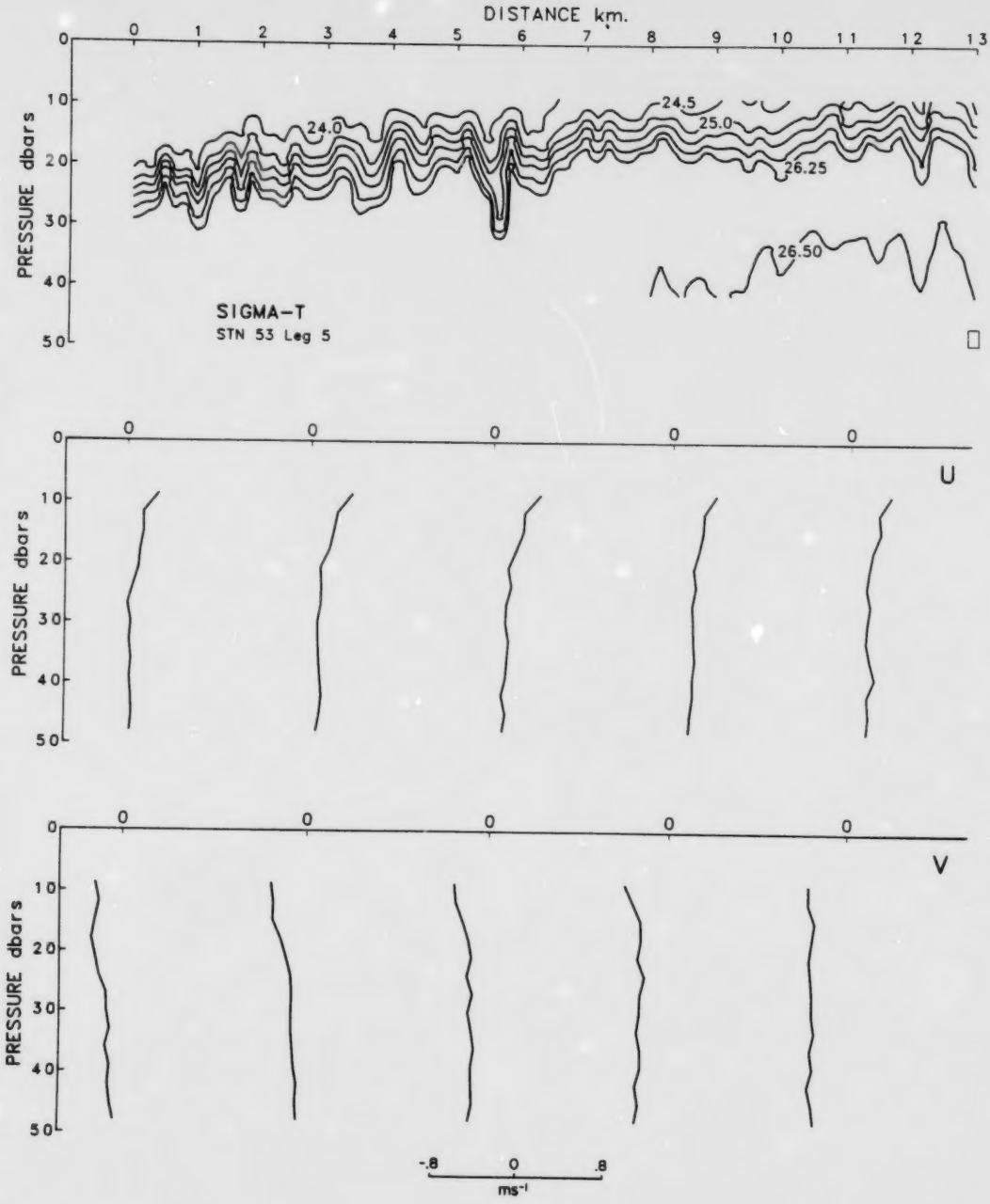

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
25.0
26.25
26.50
SIGMA-T
STN 53 Leg 5
U
V
-.8 0 .8
ms⁻¹

Fig. 179

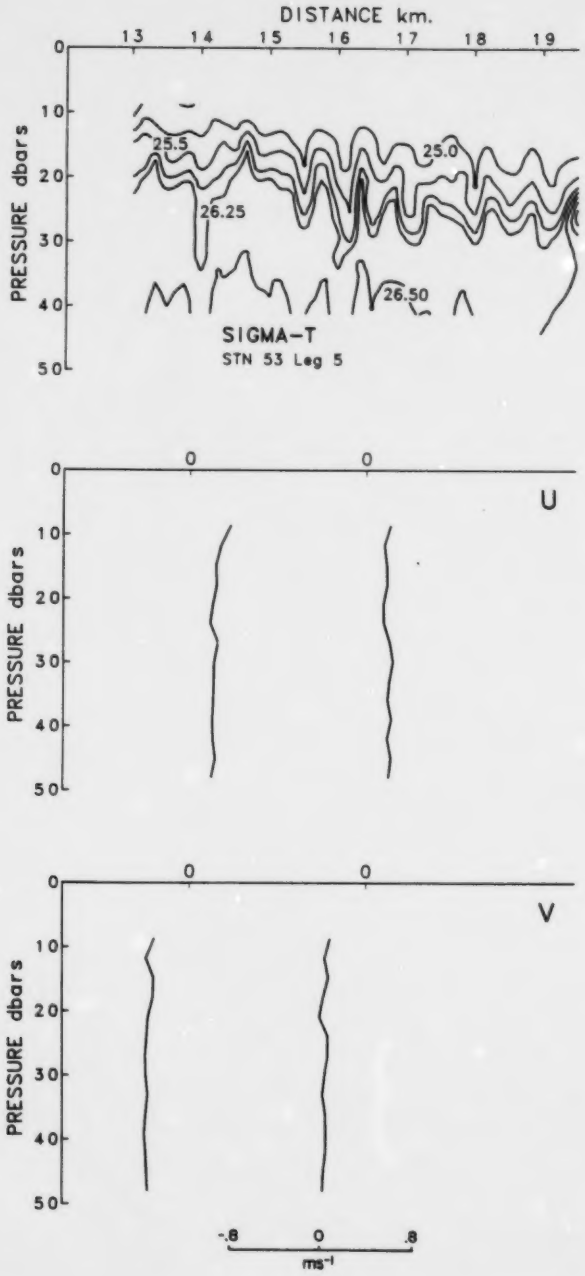

DISTANCE km.
13
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
25.5
25.0
26.25
26.50
SIGMA-T
STN 53 Leg 5
U
V
-.8
0
.8
ms⁻¹

Fig. 180

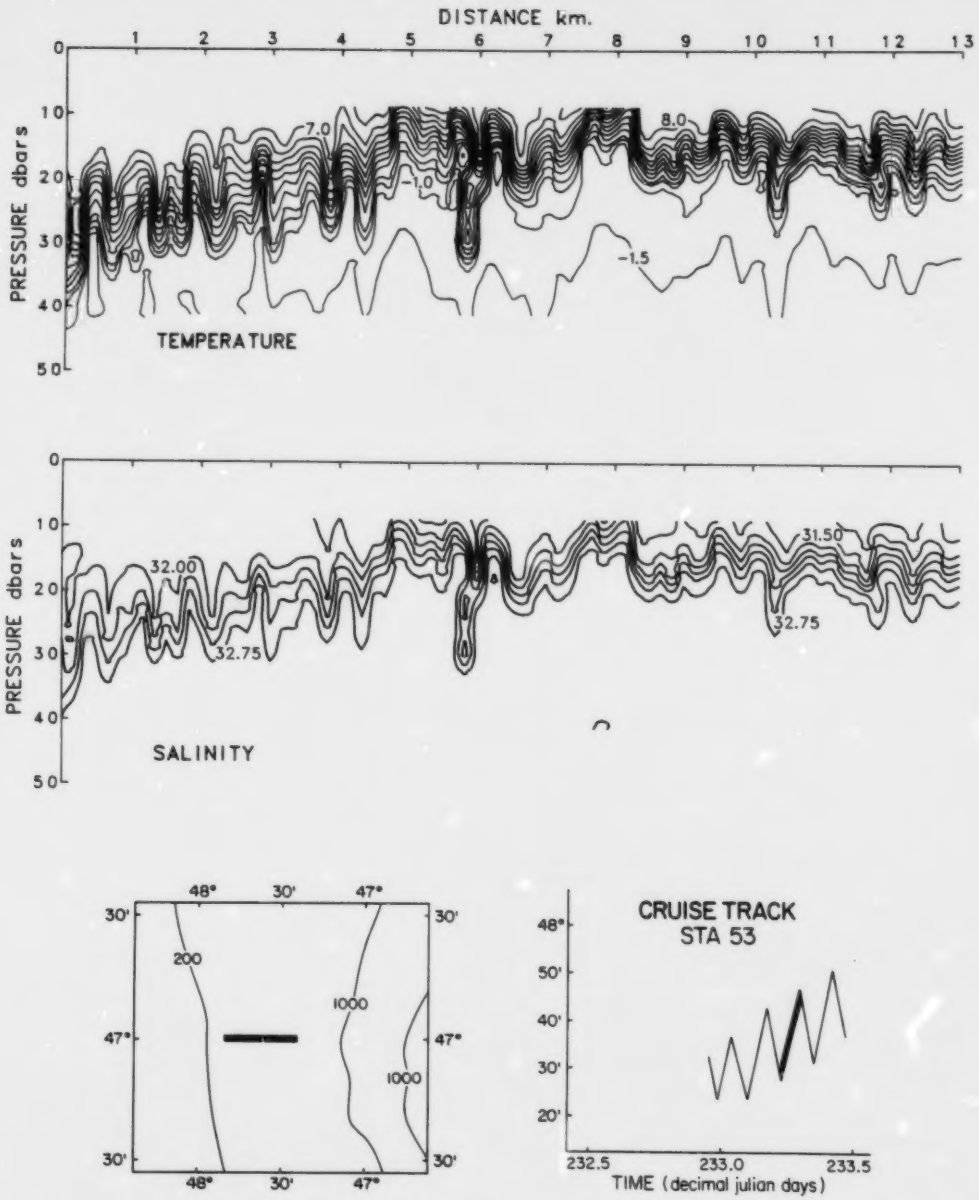

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
7.0
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.75
31.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 53
48°
50'
40'
30'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 181

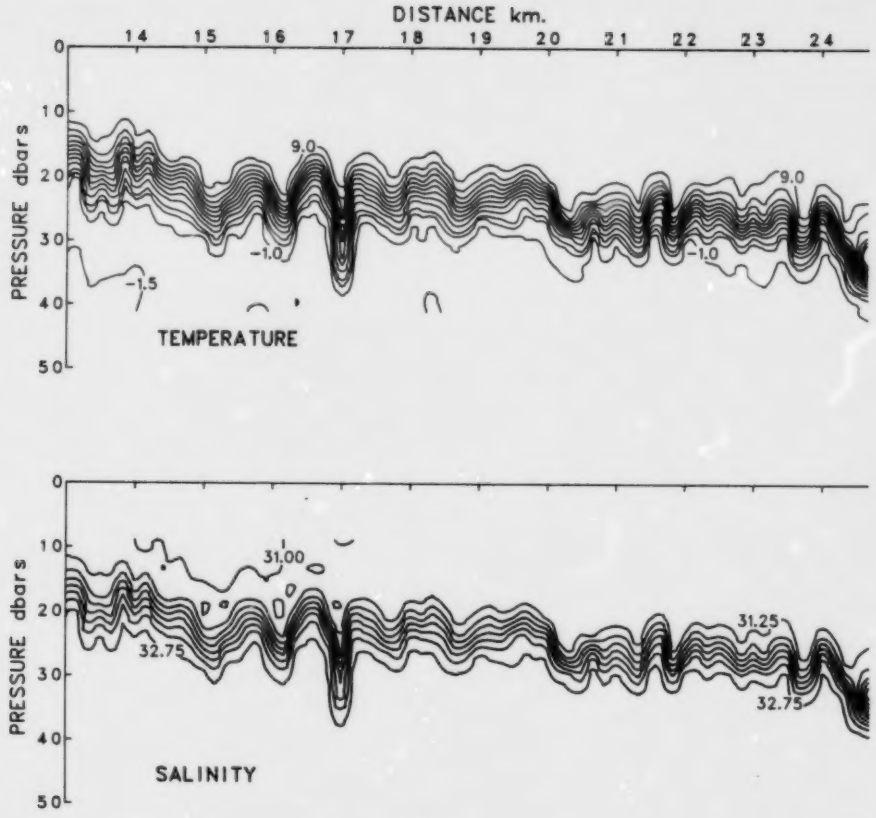

DISTANCE km.
14
15
16
17
18
19
20
21
22
23
24
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
9.0
-1.0
TEMPERATURE
31.00
32.75
31.25
32.75
SALINITY

Fig. 182

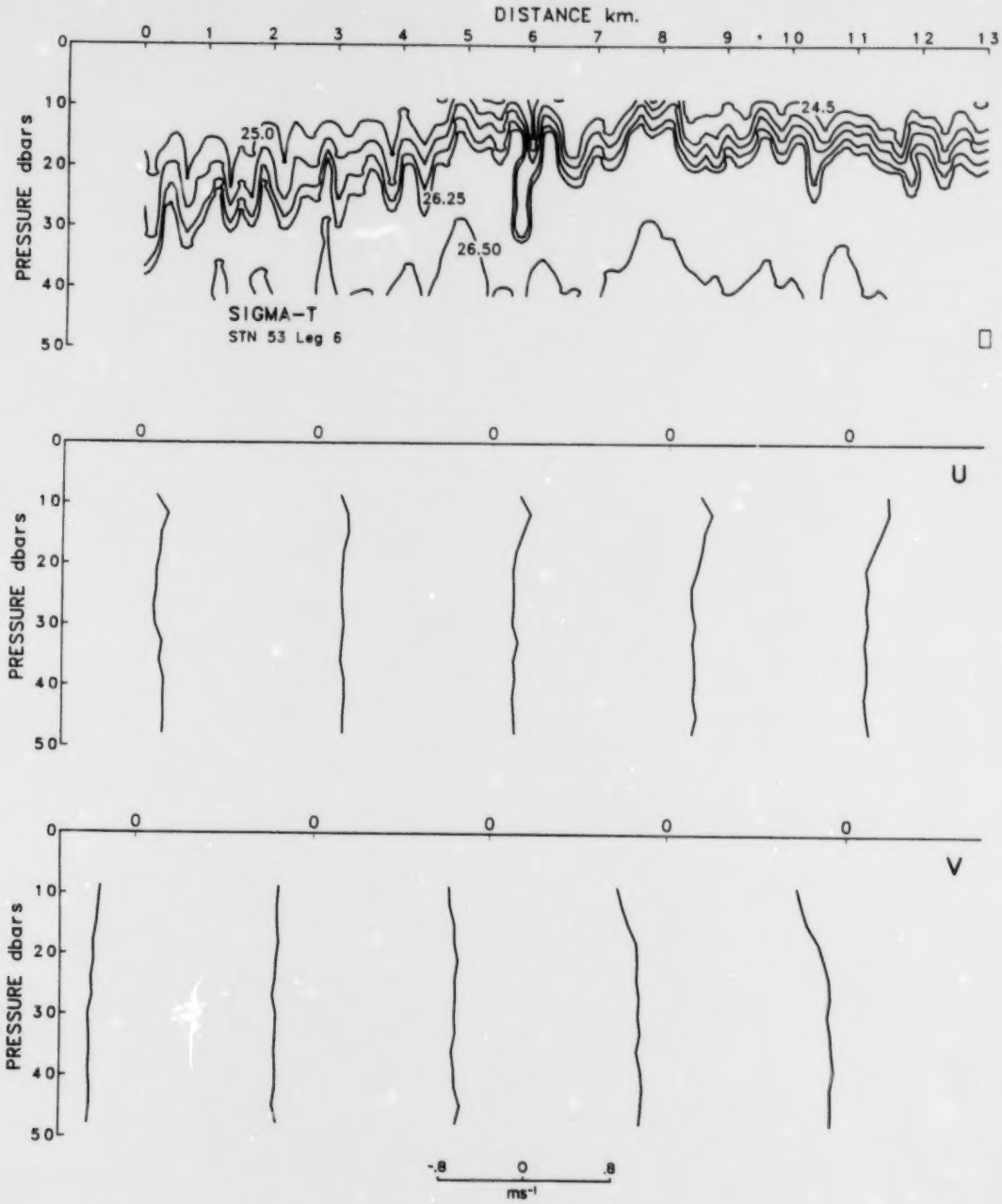

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
24.5
26.25
26.50
SIGMA-T
STN 53 Leg 6
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 183

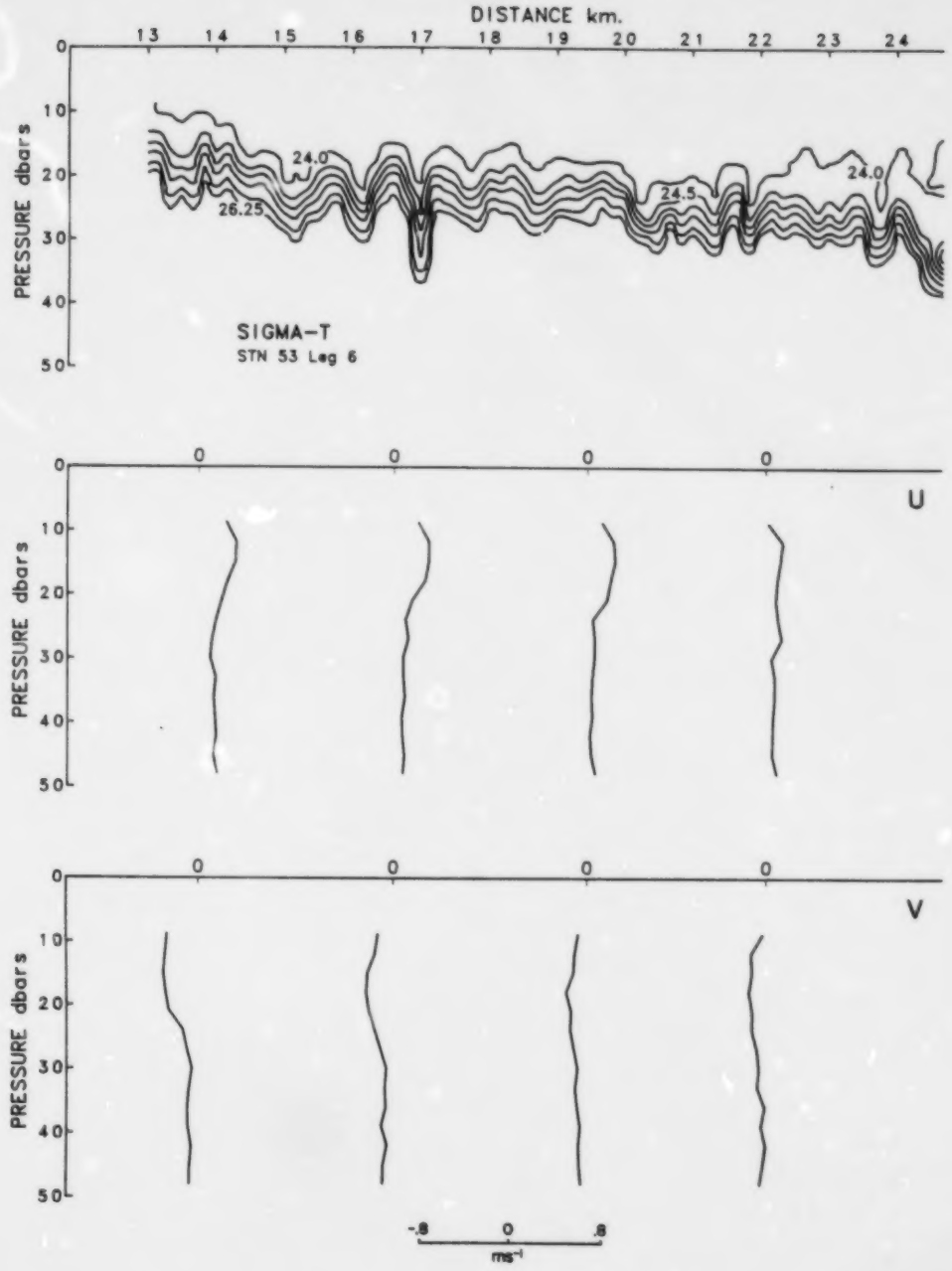

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24
PRESSURE dbars
0 10 20 30 40 50
24.0
26.25
24.5
24.0
SIGMA-T
STN 53 Leg 6
0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 184

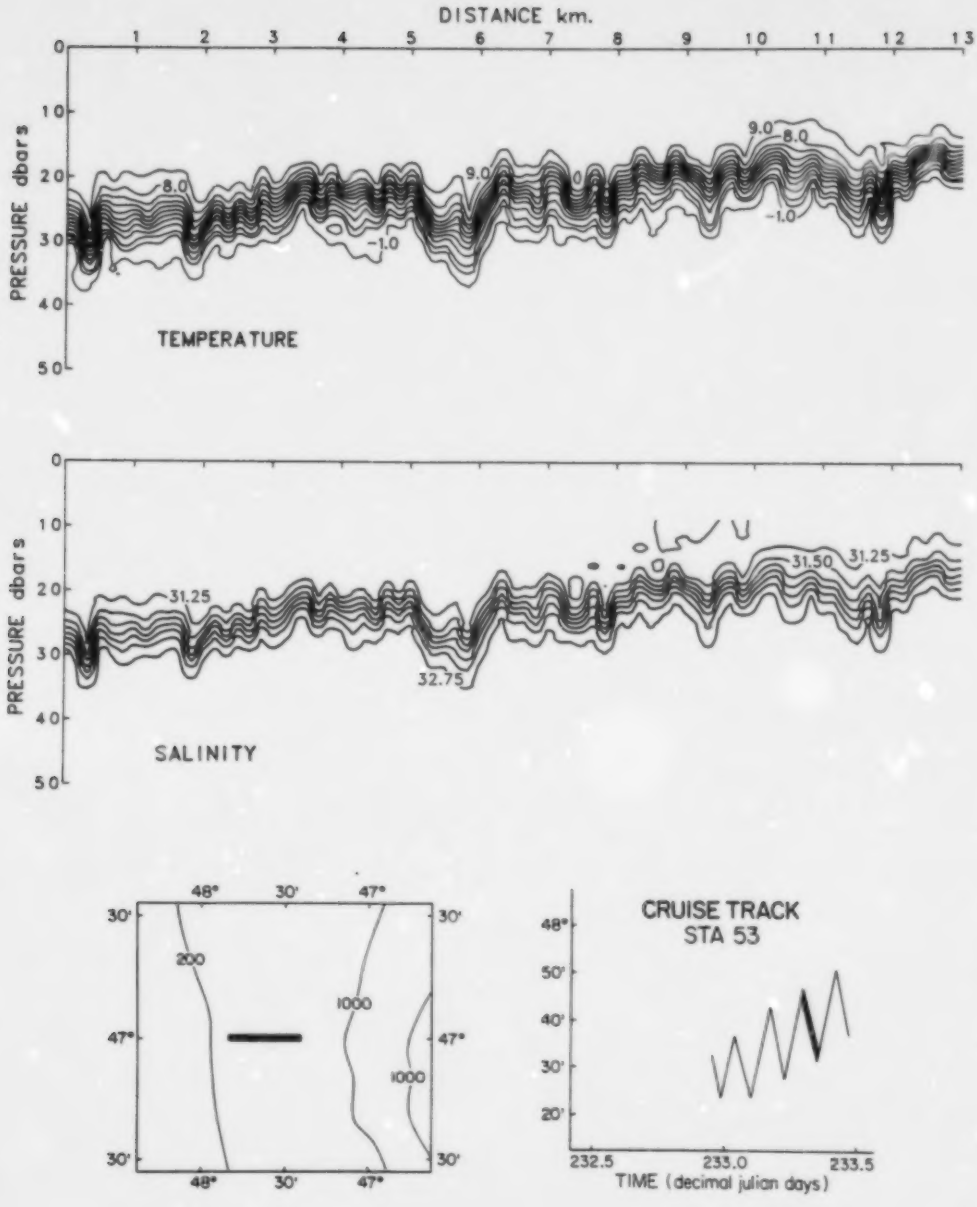

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
8.0
9.0
0
-1.0
-1.0
TEMPERATURE
31.25
31.50
31.25
31.25
32.75
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 53
50'
40'
30'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 185

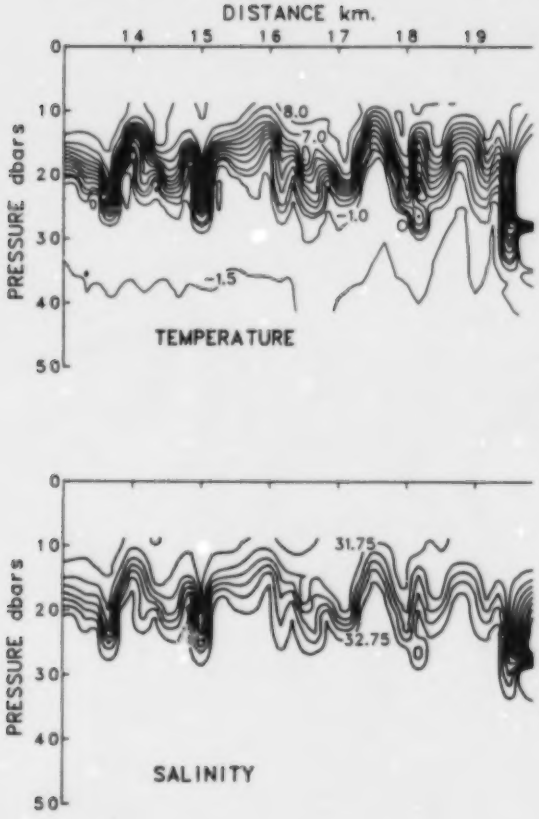

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY

Fig. 186

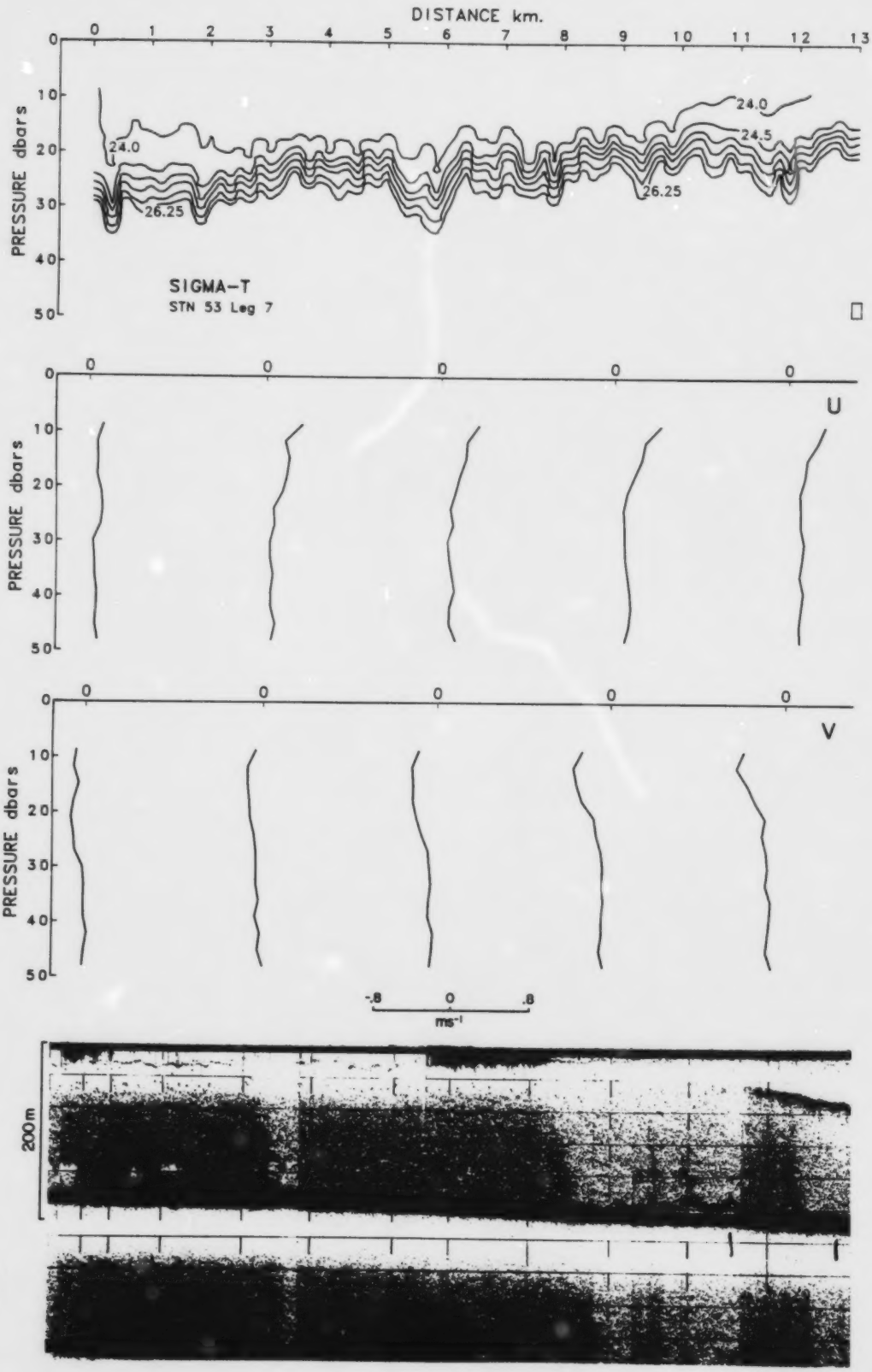

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
26.25
SIGMA-T
STN 53 Leg 7
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 187

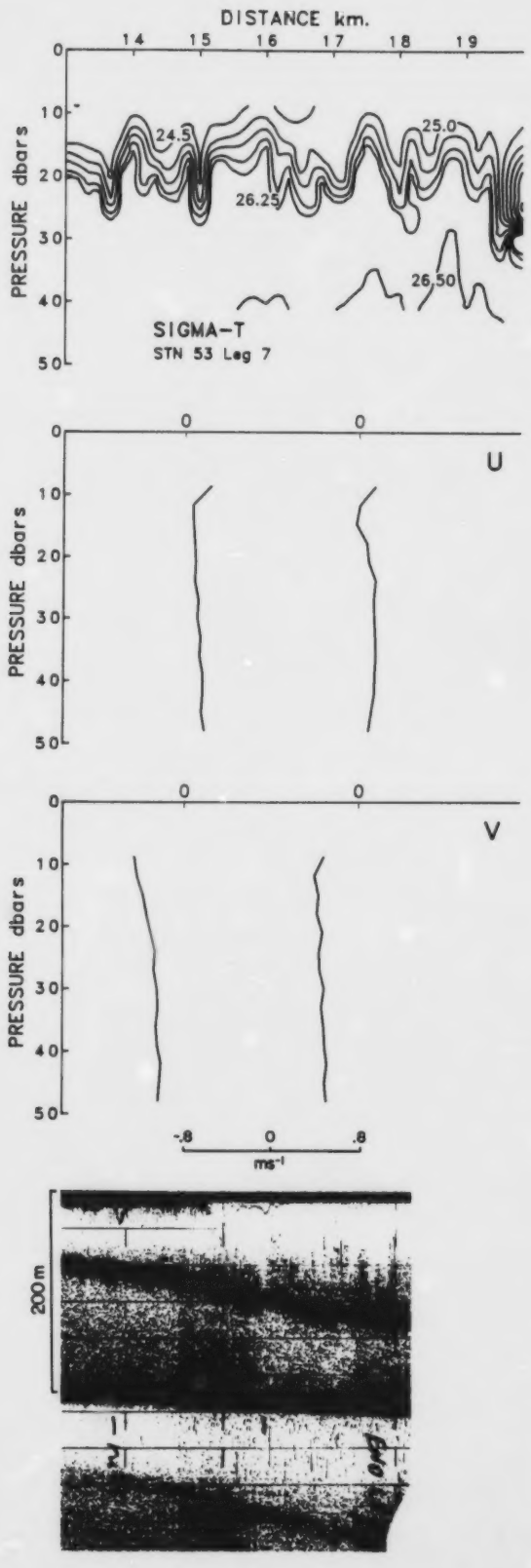

DISTANCE km.
14
15
16
17
18
19
PRESSURE dbars
24.5
25.0
26.25
26.50
SIGMA-T
STN 53 Leg 7
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 188

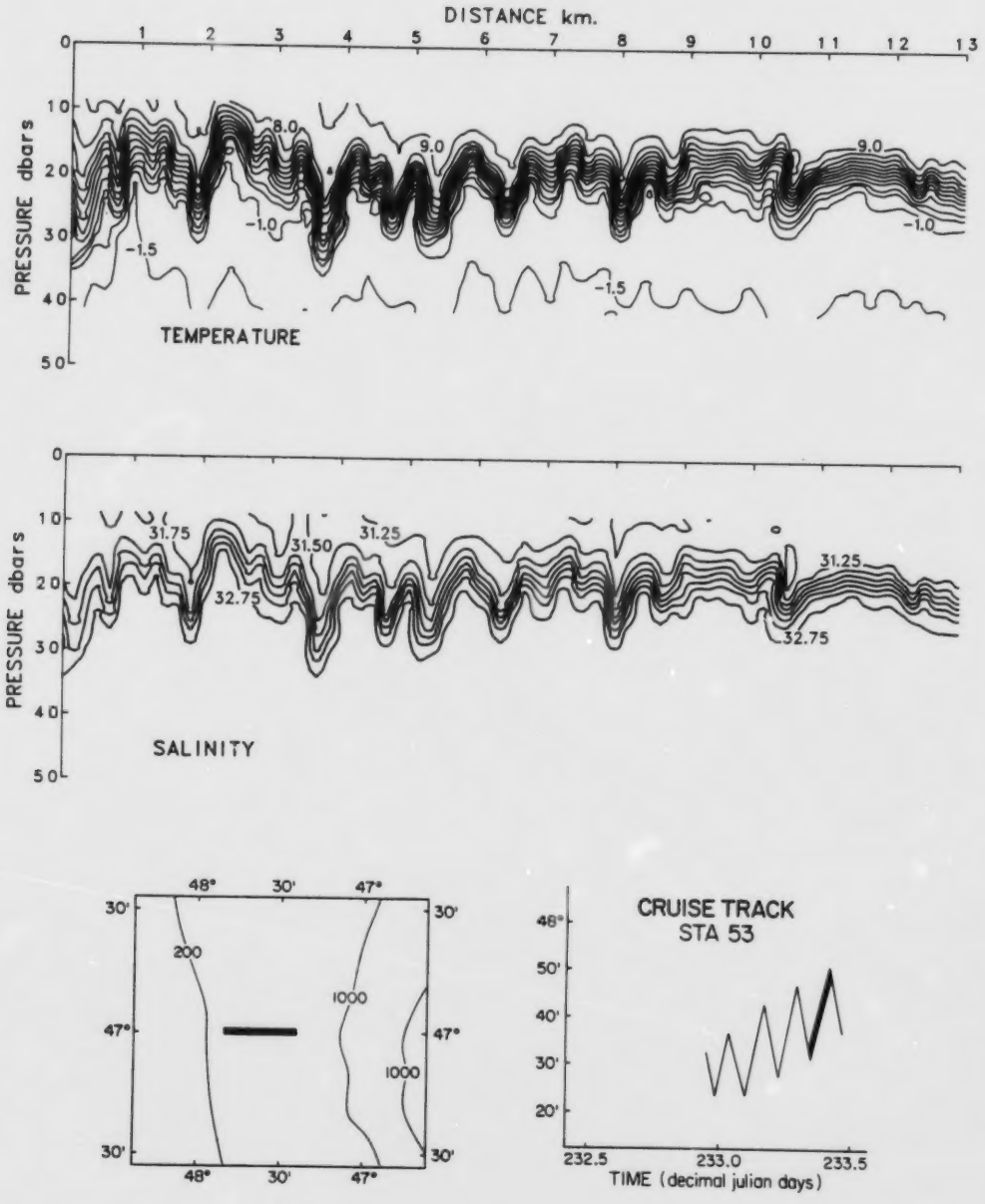

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
8.0
9.0
9.0
-1.0
-1.0
-1.5
-1.5
TEMPERATURE
0
10
20
30
40
50
31.75
31.50
31.25
31.25
32.75
32.75
PRESSURE dbars
SALINITY
48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°
CRUISE TRACK
STA 53
48°
50'
40'
30'
20'
232.5
233.0
233.5
TIME (decimal julian days)

Fig. 189

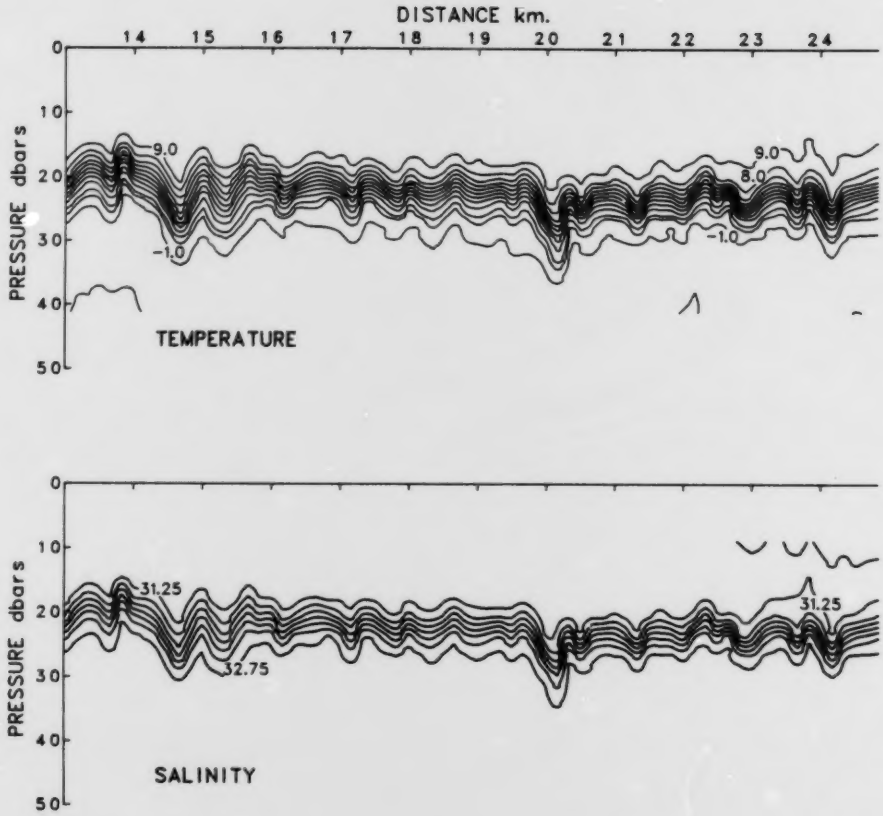

DISTANCE km.
14
15
16
17
18
19
20
21
22
23
24
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
9.0
8.0
-1.0
TEMPERATURE
31.25
32.75
31.25
SALINITY

Fig. 190

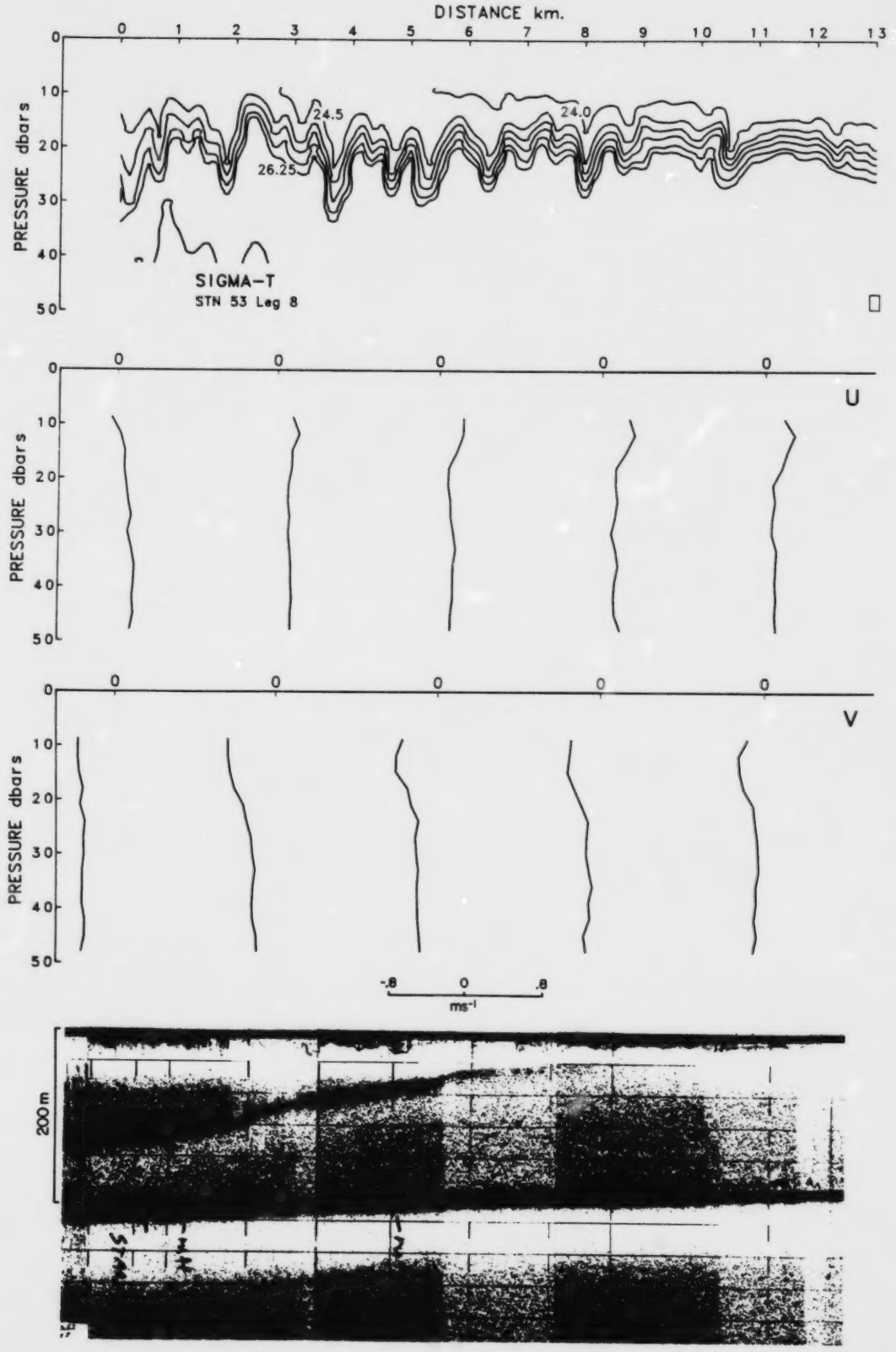

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
24.0
26.25
SIGMA-T
STN 53 Leg 8
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 191

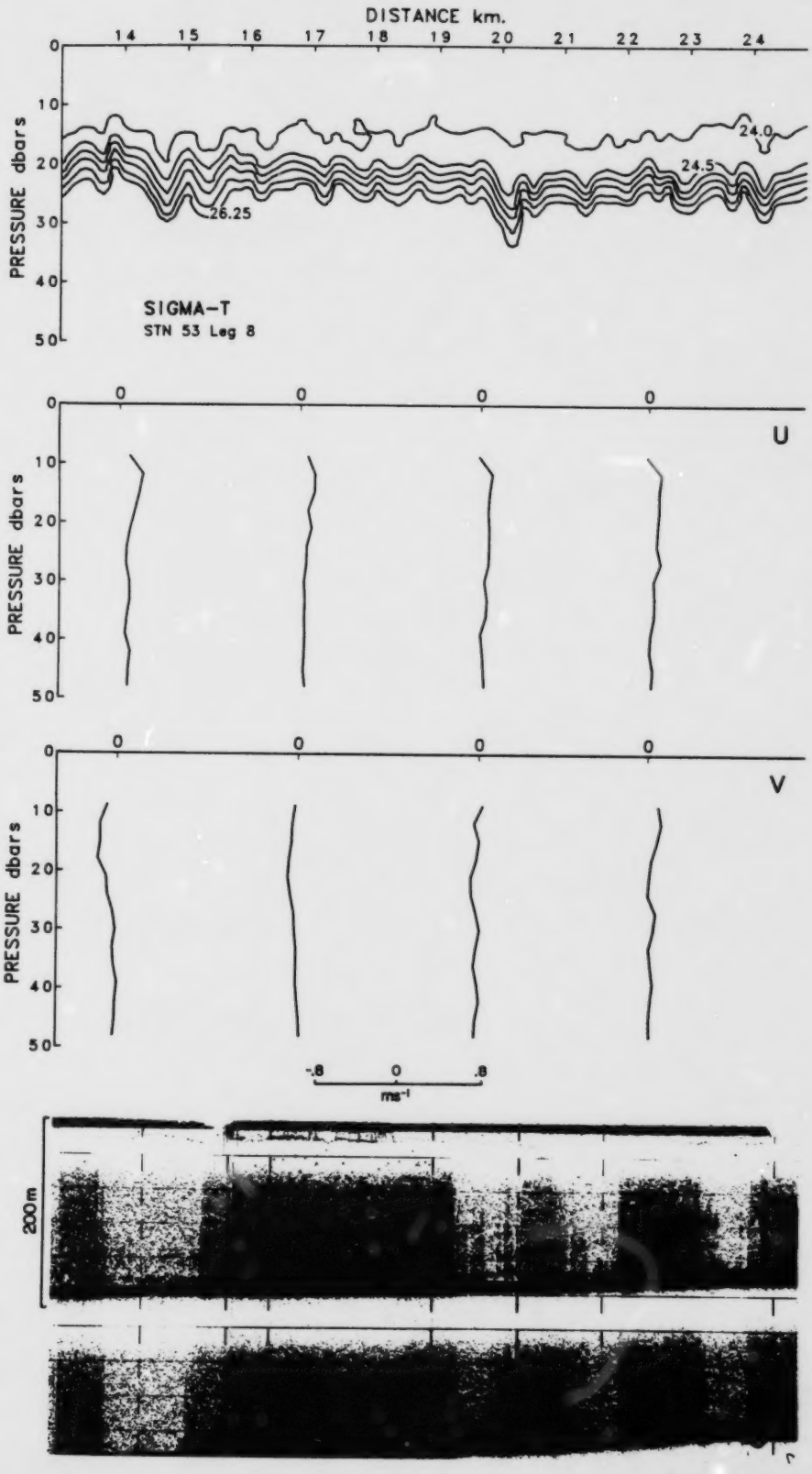

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
26.25
SIGMA-T
STN 53 Leg 8
0 0 0 0
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 192

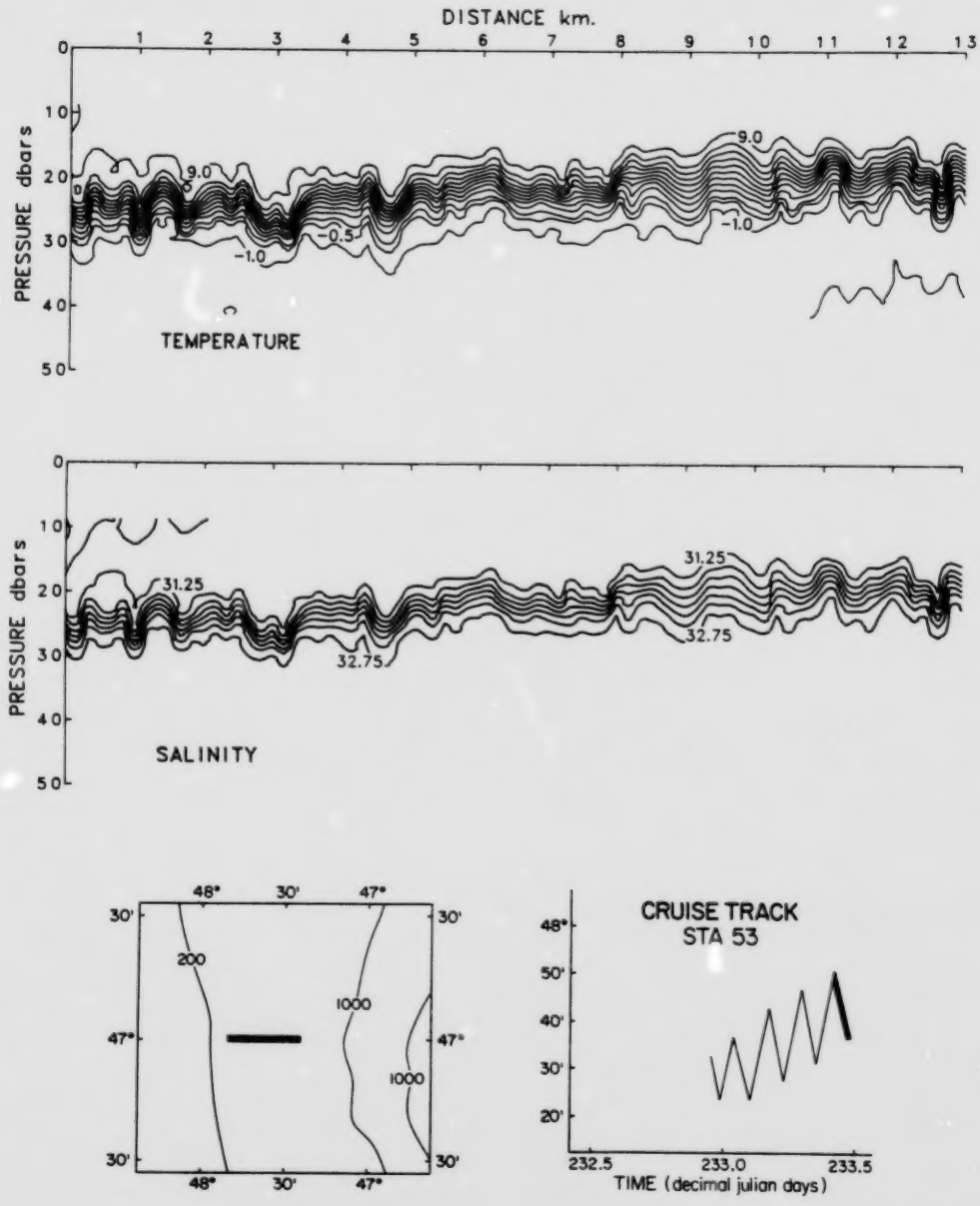

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
9.0
-1.0
-0.5
TEMPERATURE
31.25
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
CRUISE TRACK
STA 53
48° 50' 40' 30' 20'
232.5 233.0 233.5
TIME (decimal julian days)

Fig. 193

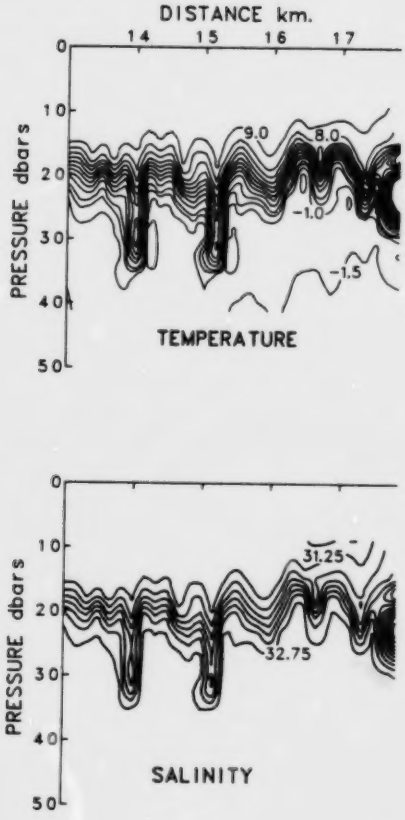

DISTANCE km.
14
15
16
17
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.25
32.75
SALINITY

Fig. 194

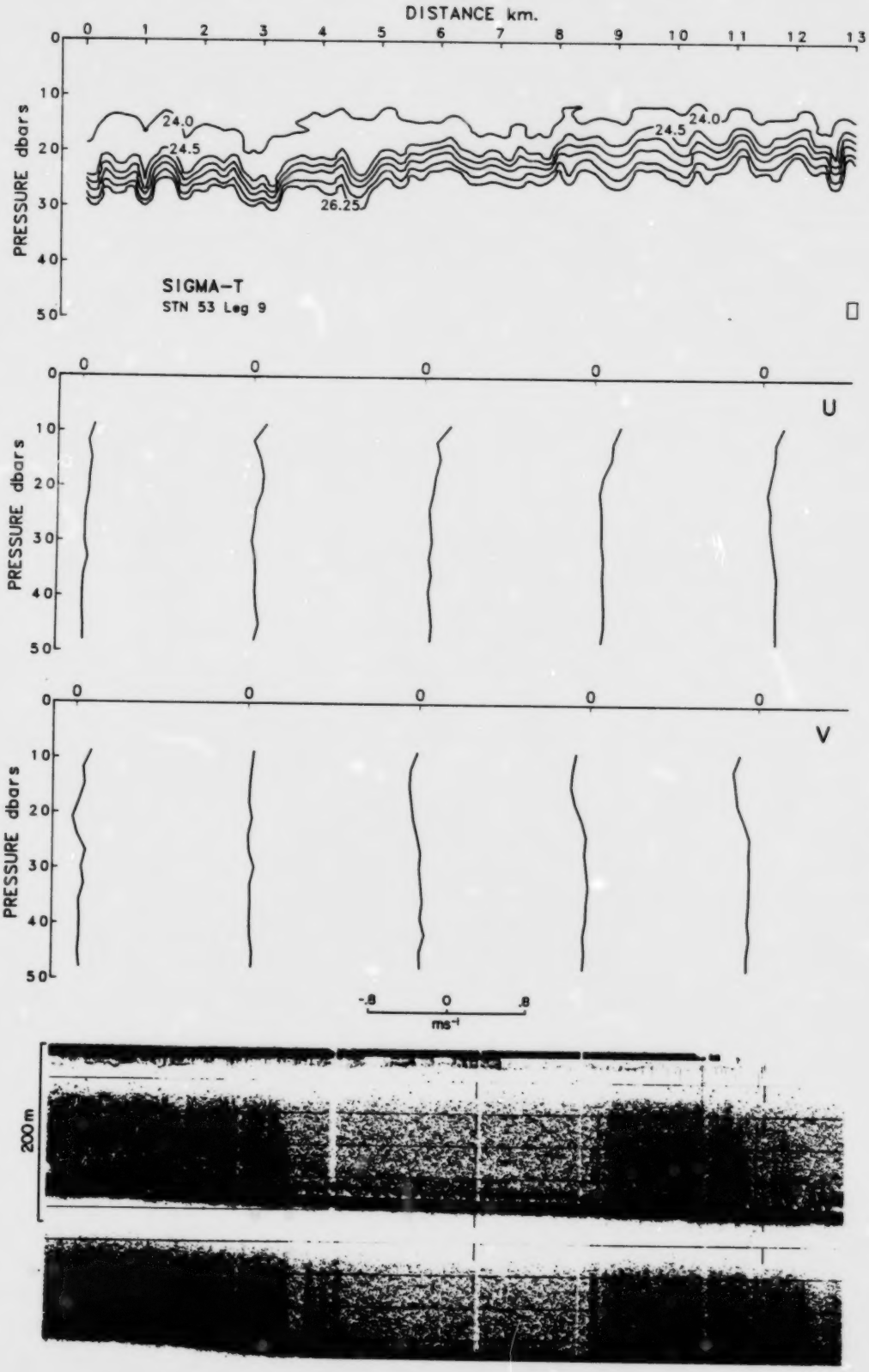

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
26.25
24.0
24.5
SIGMA-T
STN 53 Leg 9
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 195

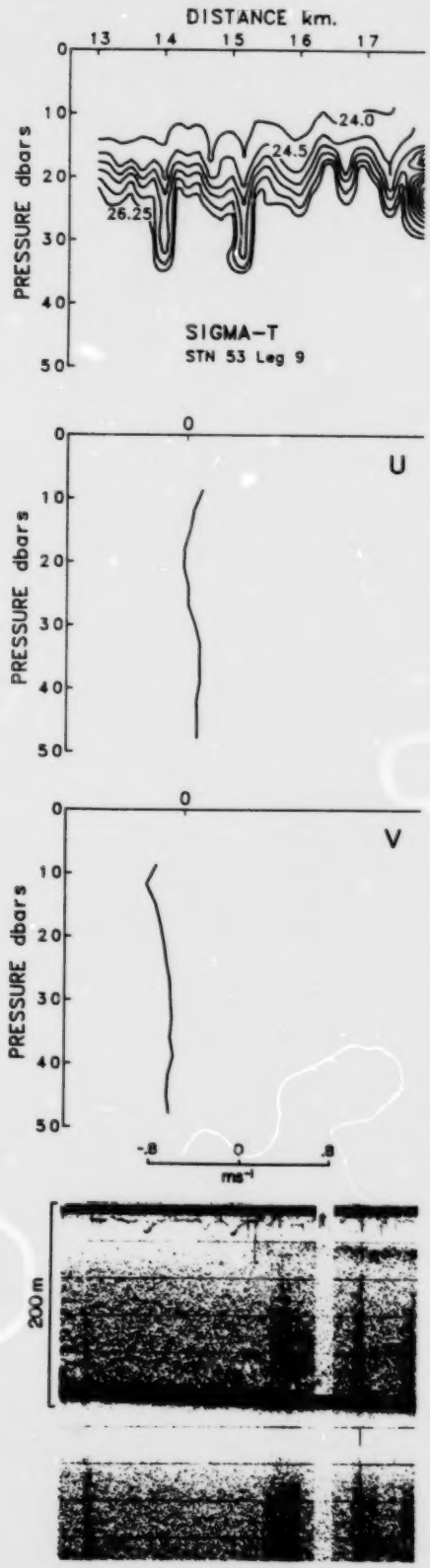

DISTANCE km.
13
14
15
16
17
PRESSURE dbars
24.0
24.5
26.25
SIGMA-T
STN 53 Leg 9
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 196

Figures 197-224

BATFISH station 54; 7 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

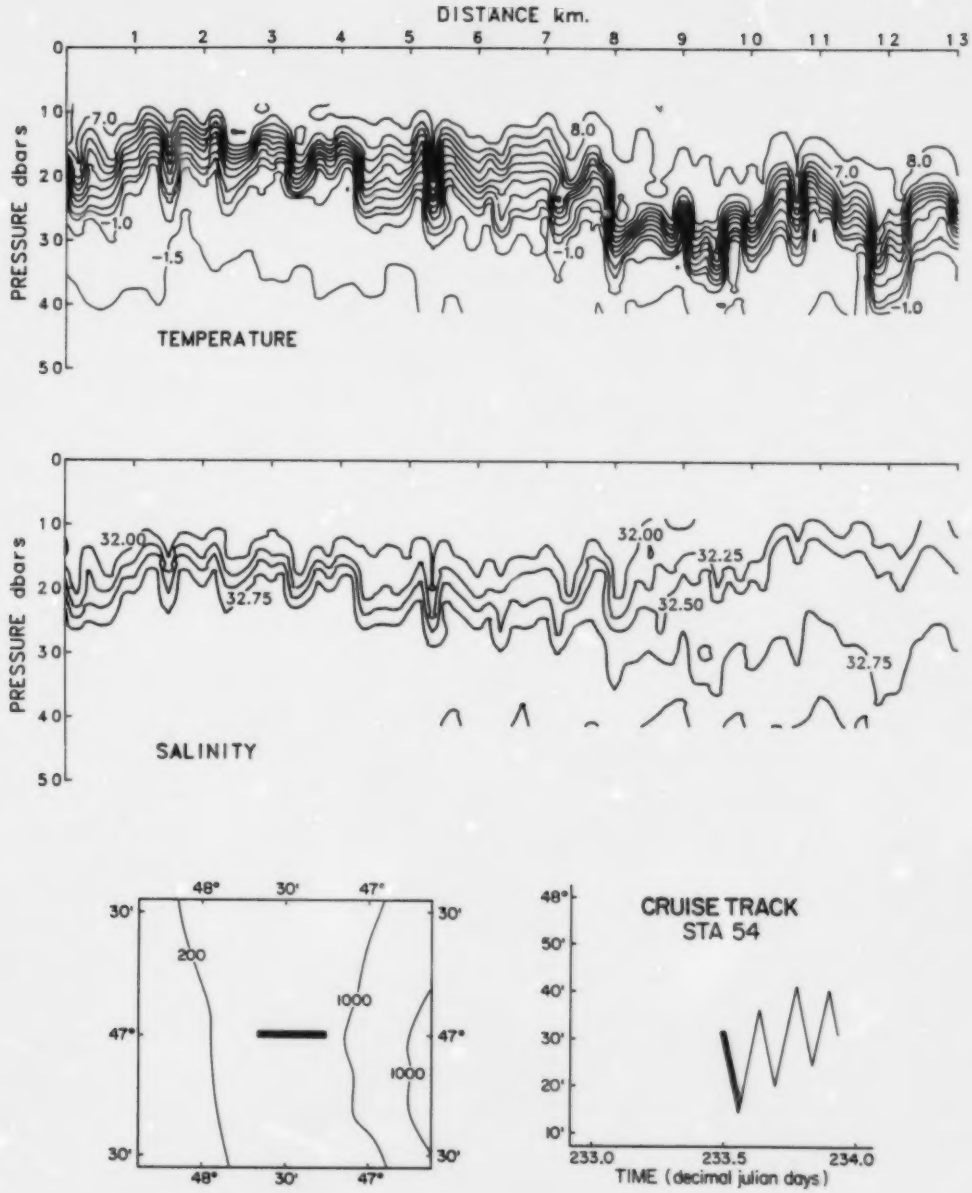

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
7.0
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 54
233.0
233.5
234.0
TIME (decimal julian days)

Fig. 197

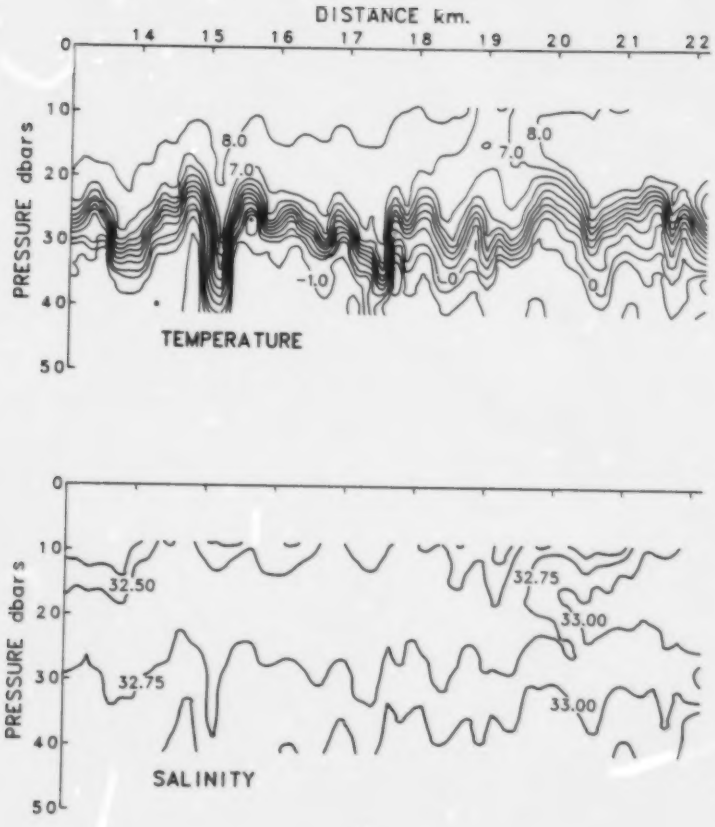

DISTANCE km.
14
15
16
17
18
19
20
21
22
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-1.0
TEMPERATURE
32.50
32.75
33.00
SALINITY

Fig. 198

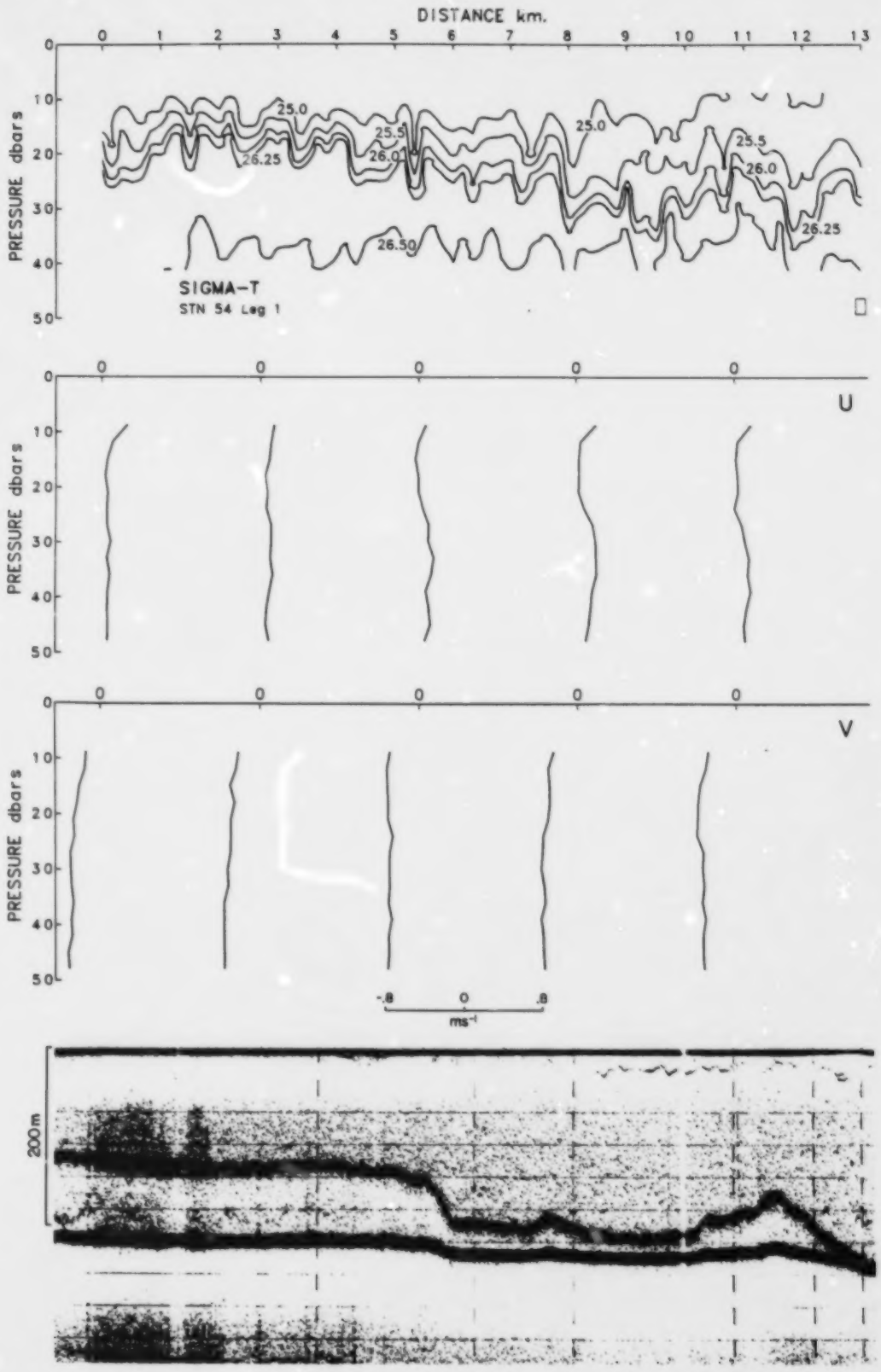

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 54 Leg 1
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 199

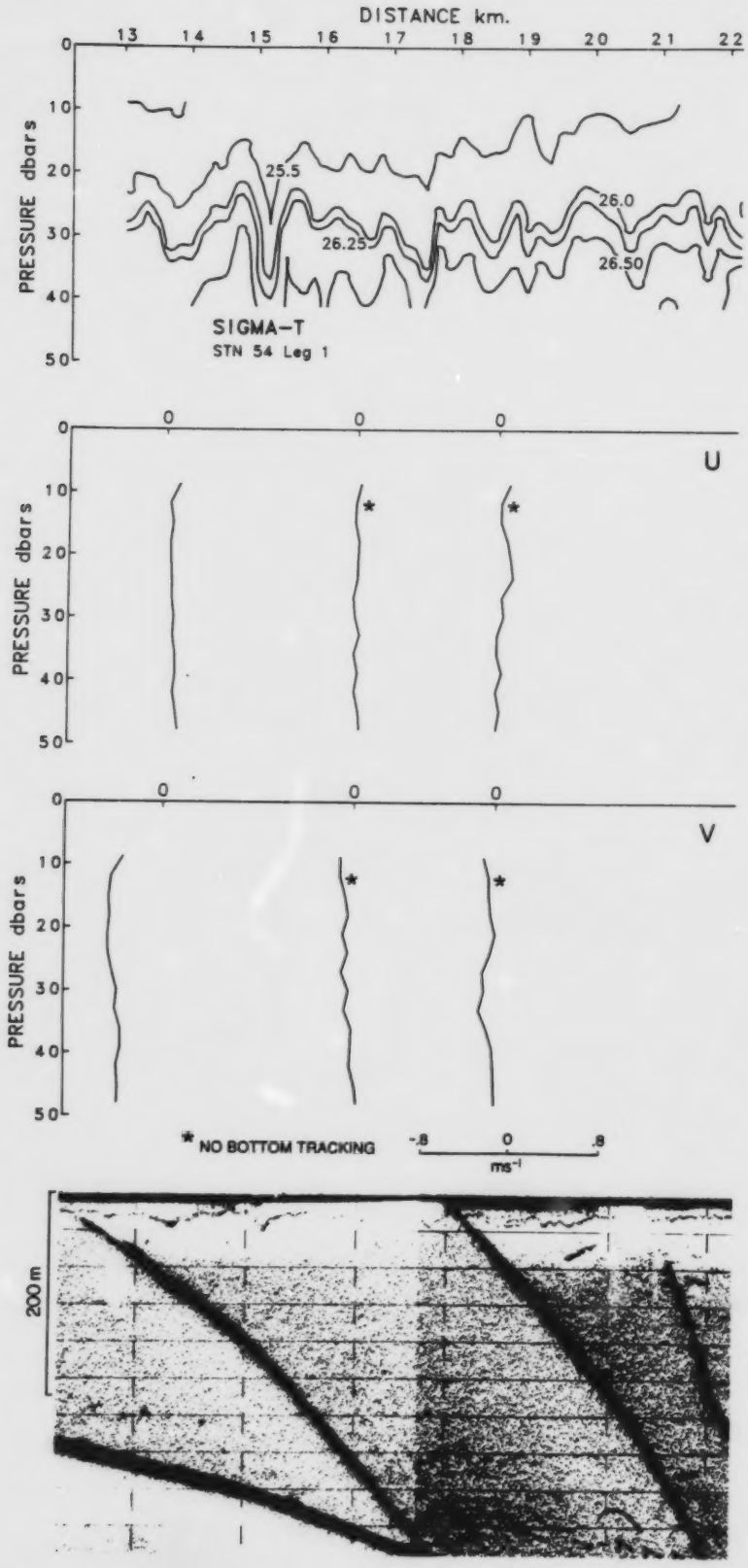

DISTANCE km.
13 14 15 16 17 18 19 20 21 22
PRESSURE dbars
0 10 20 30 40 50
25.5
26.0
26.25
26.50
SIGMA-T
STN 54 Leg 1
U
V
0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹
200m

Fig. 200

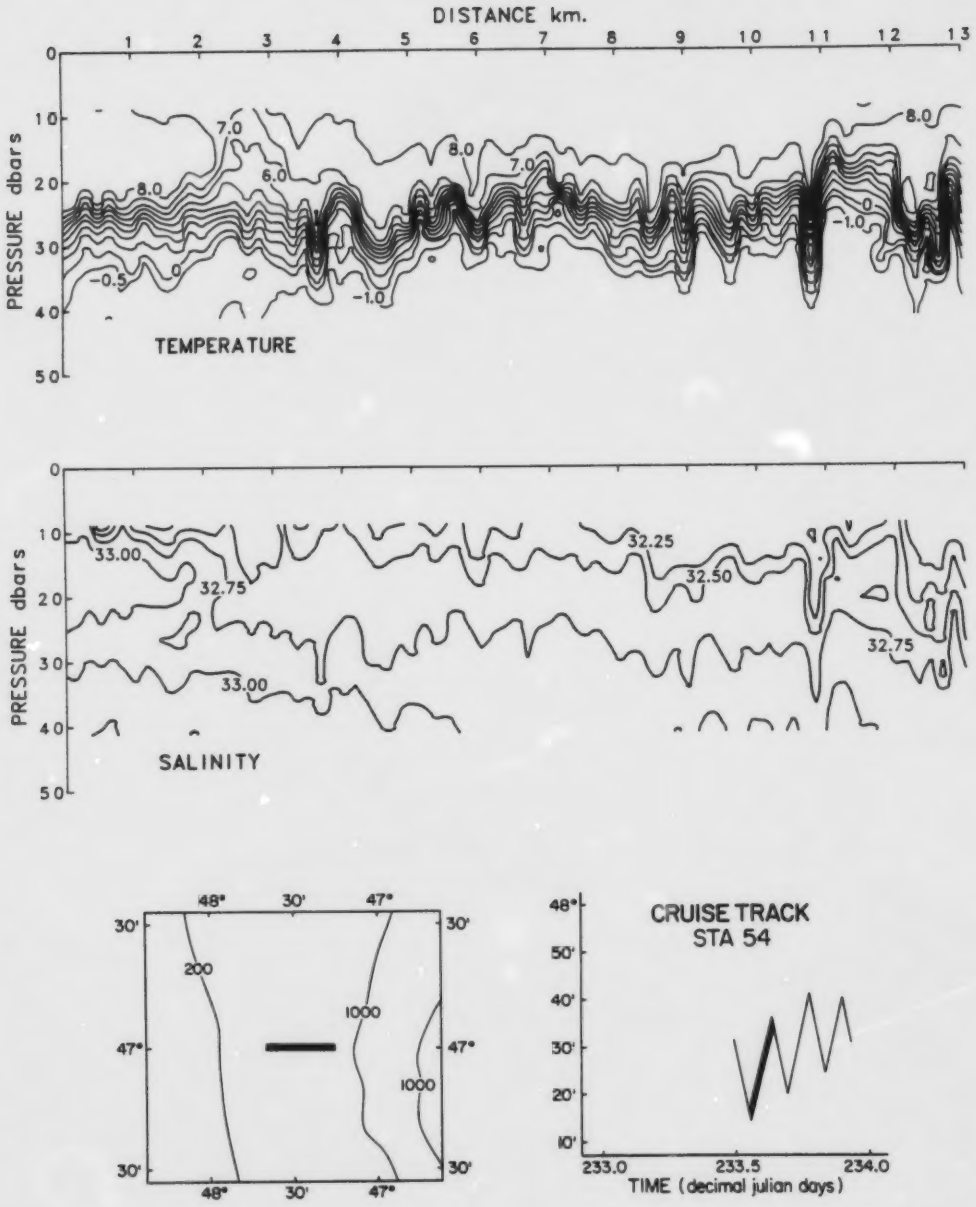

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
7.0
8.0
6.0
8.0
7.0
8.0
-0.5
0
-1.0
-1.0
TEMPERATURE
33.00
32.75
32.25
32.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 54
50'
40'
30'
20'
10'
233.0
233.5
234.0
TIME (decimal julian days)

Fig. 201

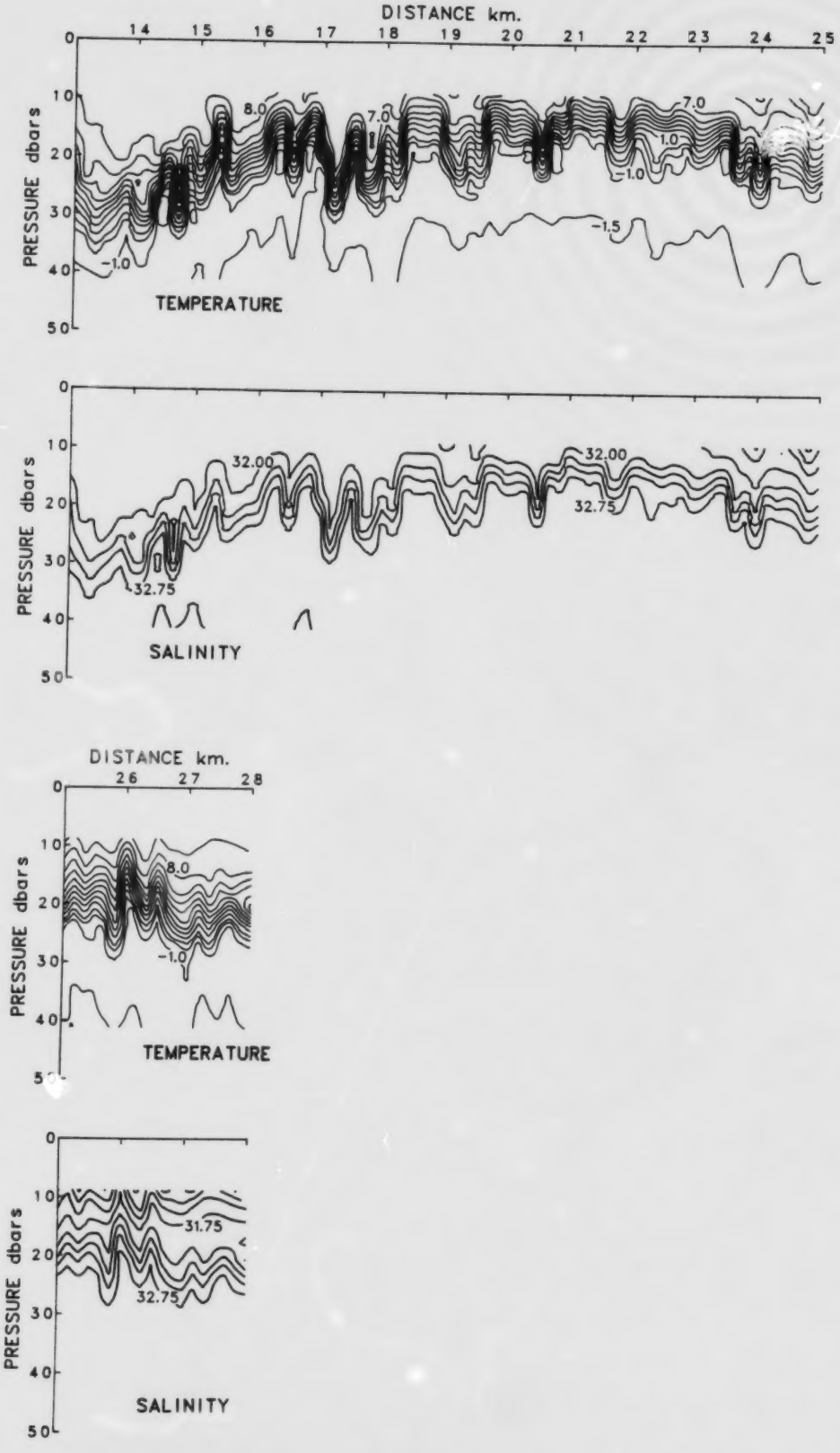

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
8.0
7.0
7.0
1.0
-1.0
-1.5
-1.0
TEMPERATURE
32.00
32.00
32.75
32.75
SALINITY
DISTANCE km.
26 27 28
8.0
-1.0
TEMPERATURE
31.75
32.75
SALINITY

Fig. 202

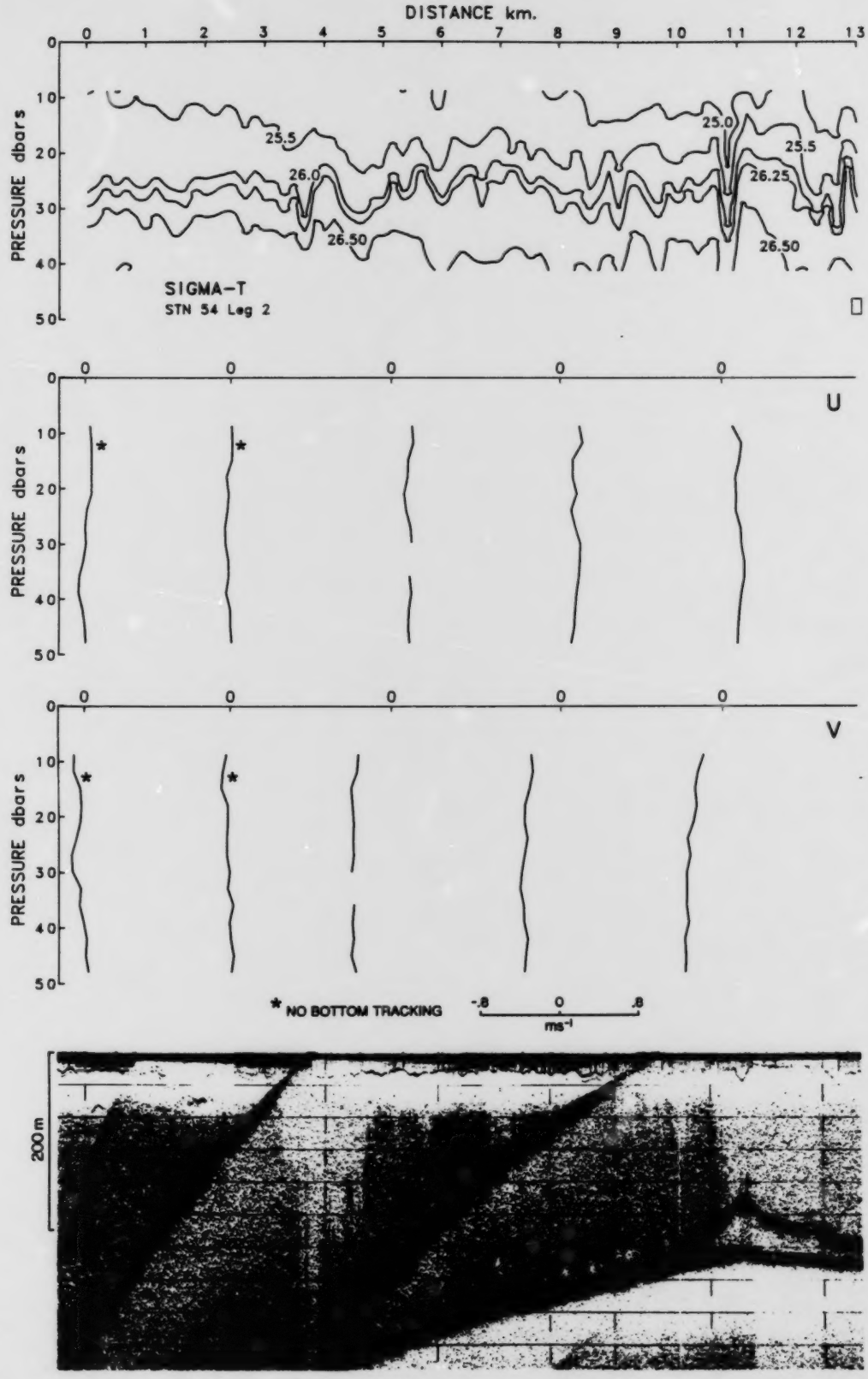

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
U
25.5
26.0
26.50
25.0
25.5
26.25
26.50
SIGMA-T
STN 54 Leg 2
0 0 0 0 0
U
PRESSURE dbars
0 10 20 30 40 50
0 0 0 0 0
V
PRESSURE dbars
0 10 20 30 40 50
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹
200 m

Fig. 203

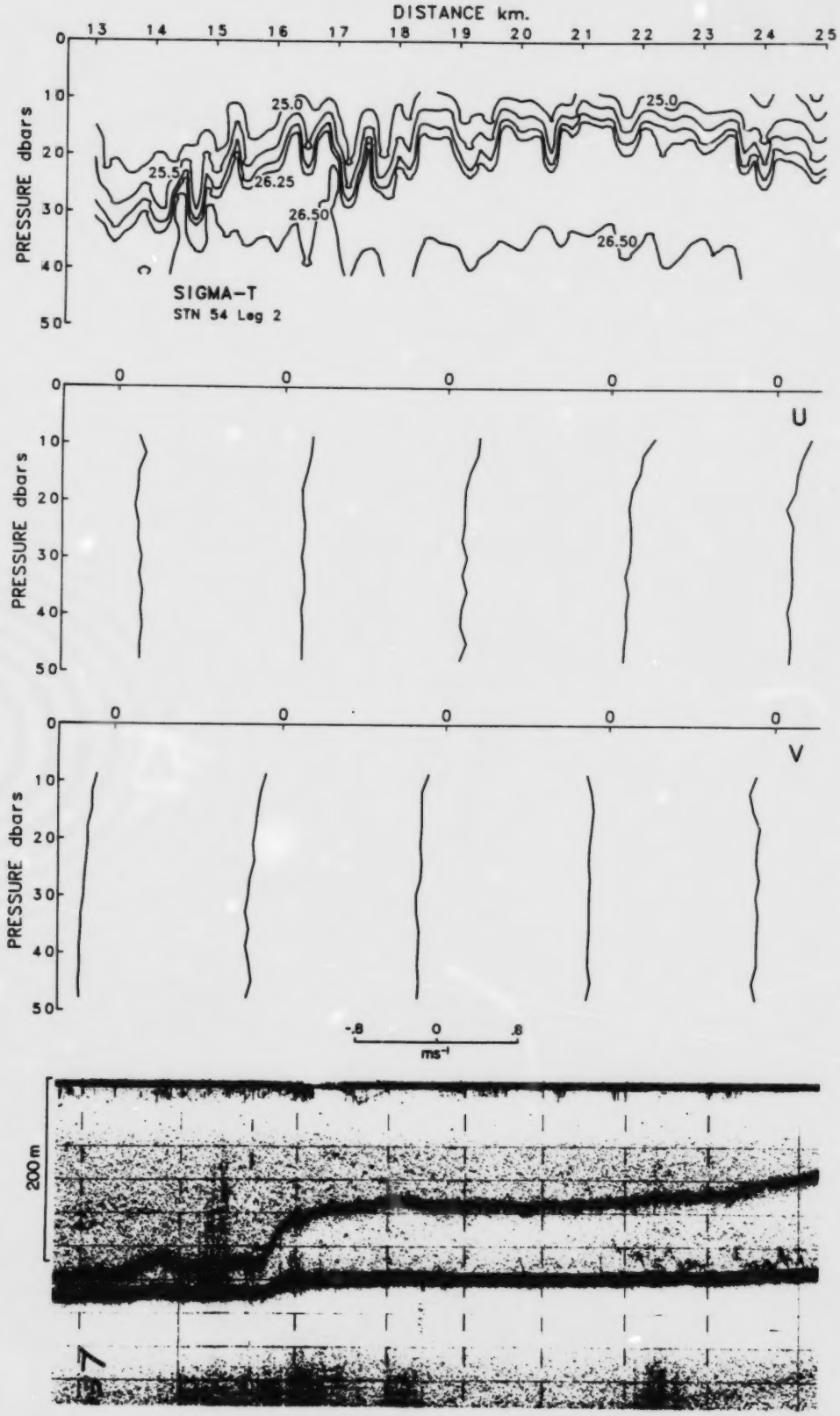

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.25
26.50
25.0
26.50
SIGMA-T
STN 54 Leg 2
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 204

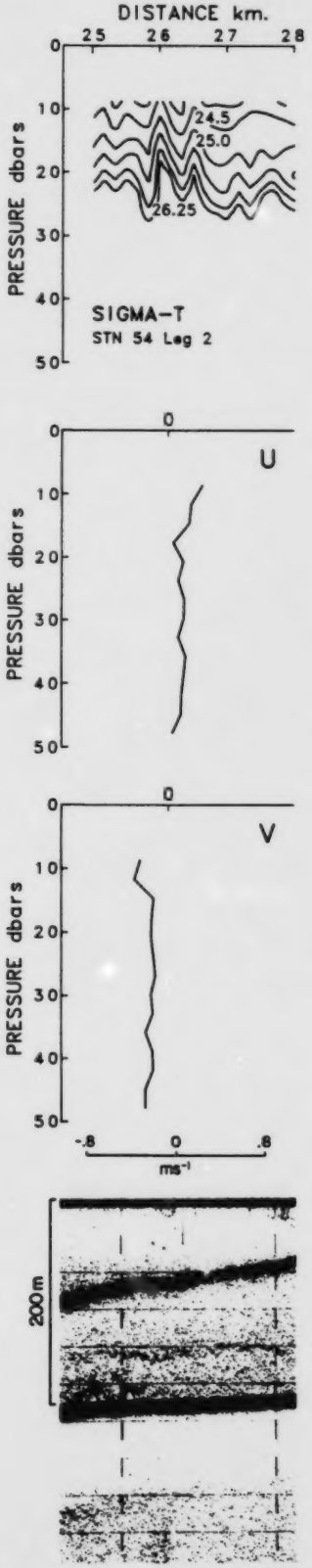

DISTANCE km.
25
26
27
28
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.25
SIGMA-T
STN 54 Leg 2
0
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 205

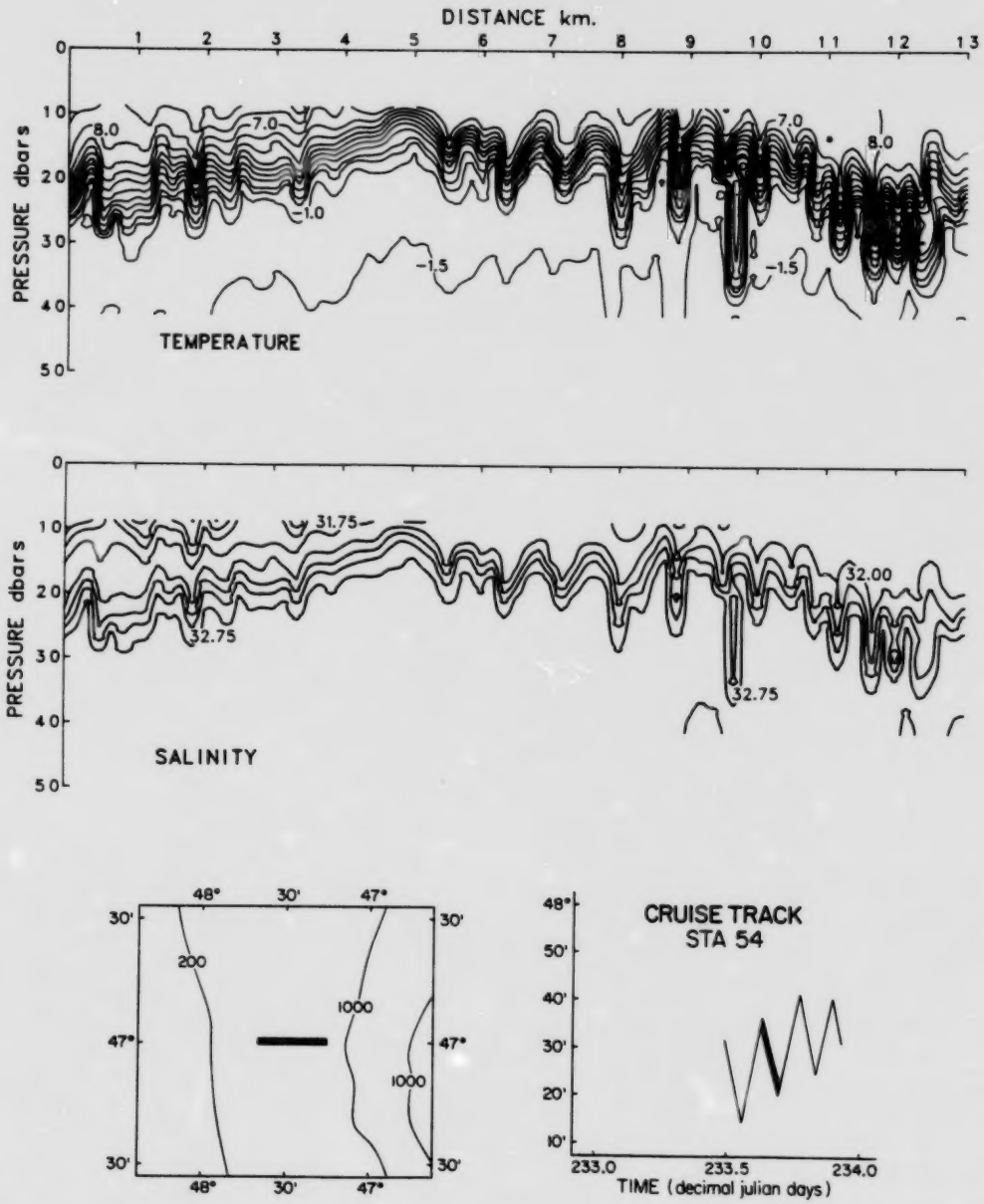

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
8.0
7.0
-1.0
-1.5
7.0
8.0
-1.5
TEMPERATURE
31.75
32.75
32.00
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 54
48° 50' 40' 30' 20' 10'
233.0 233.5 234.0
TIME (decimal julian days)

Fig. 206

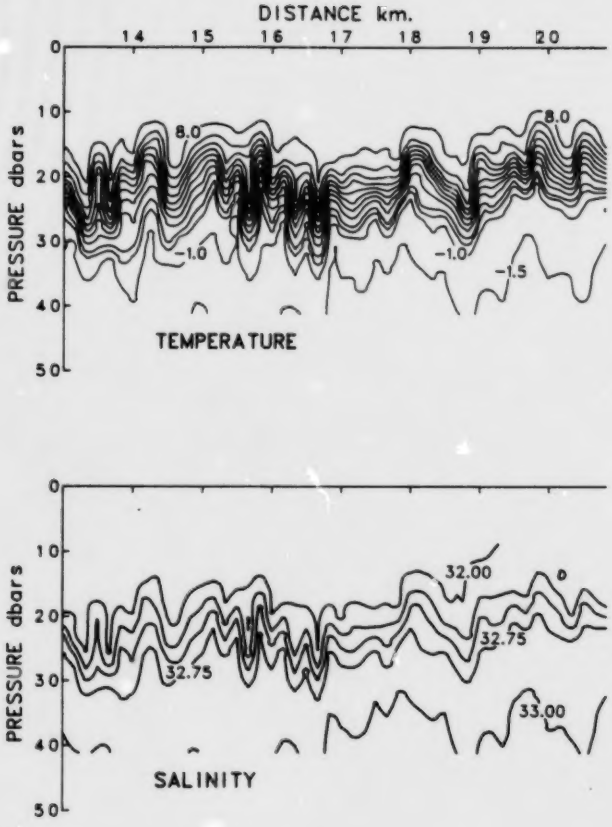

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
8.0
8.0
-1.0
-1.0
-1.5
TEMPERATURE
32.00
32.75
32.75
33.00
SALINITY

Fig. 207

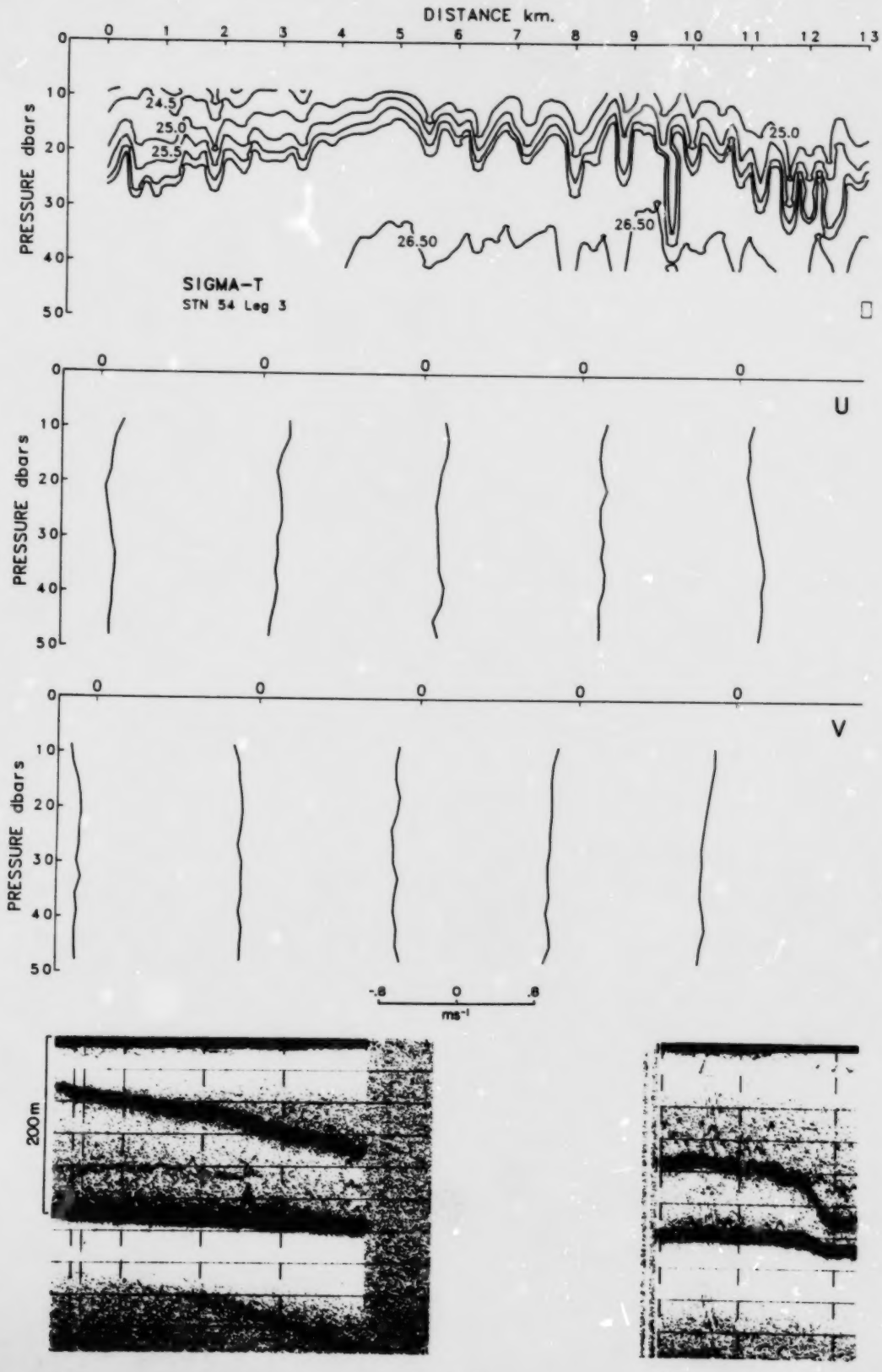

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
25.5
25.0
26.50
26.50
SIGMA-T
STN 54 Leg 3
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 208

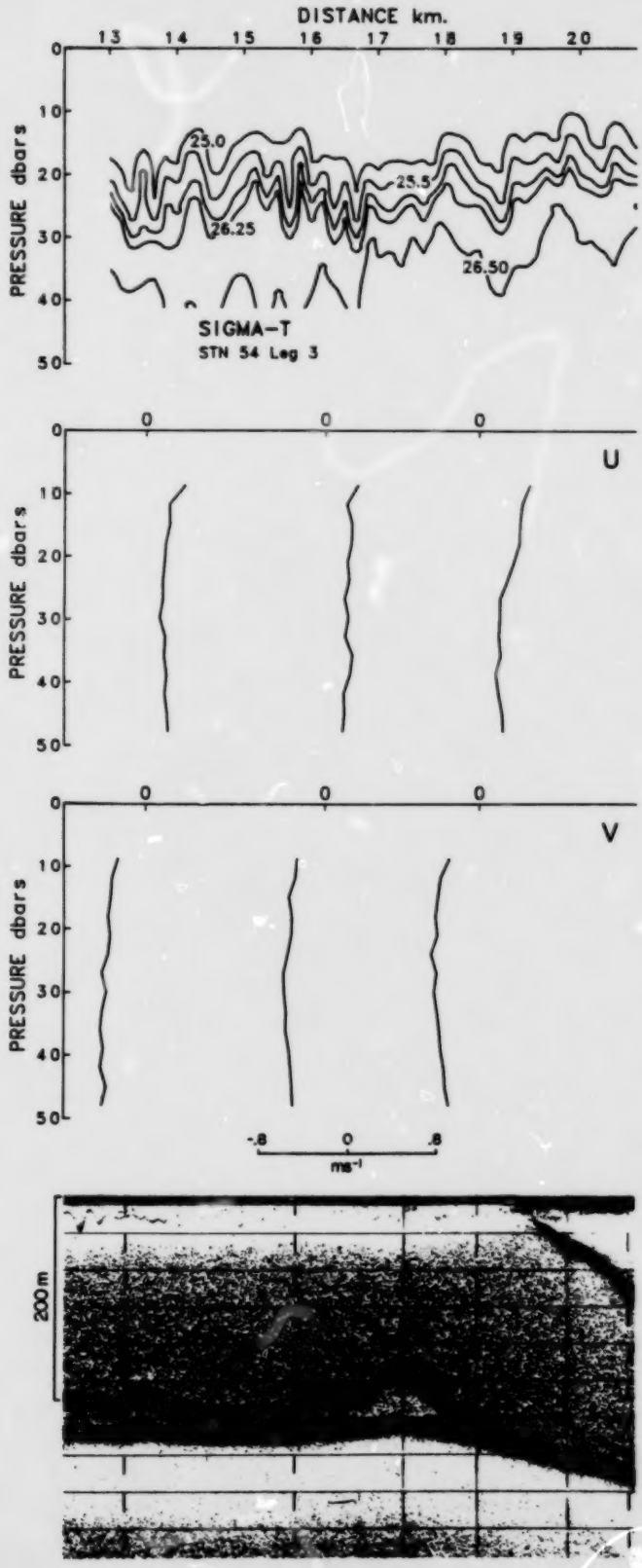

DISTANCE km.
13 14 15 16 17 18 19 20
PRESSURE dbars
0 10 20 30 40 50
23.0
25.5
26.25
26.50
SIGMA-T
STN 54 Leg 3
U
V
0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 209

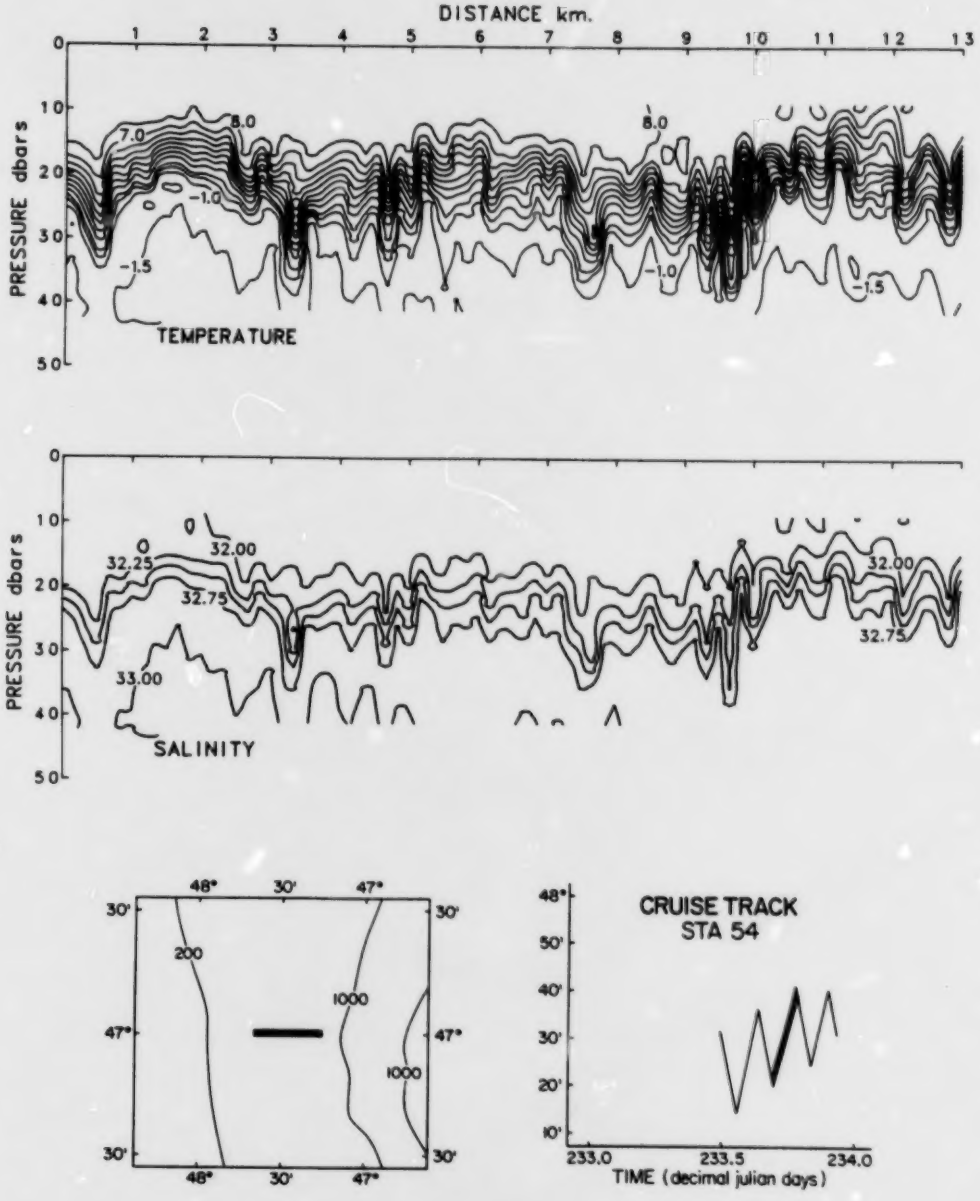

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
7.0
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 54
233.0
233.5
234.0
TIME (decimal julian days)

Fig. 210

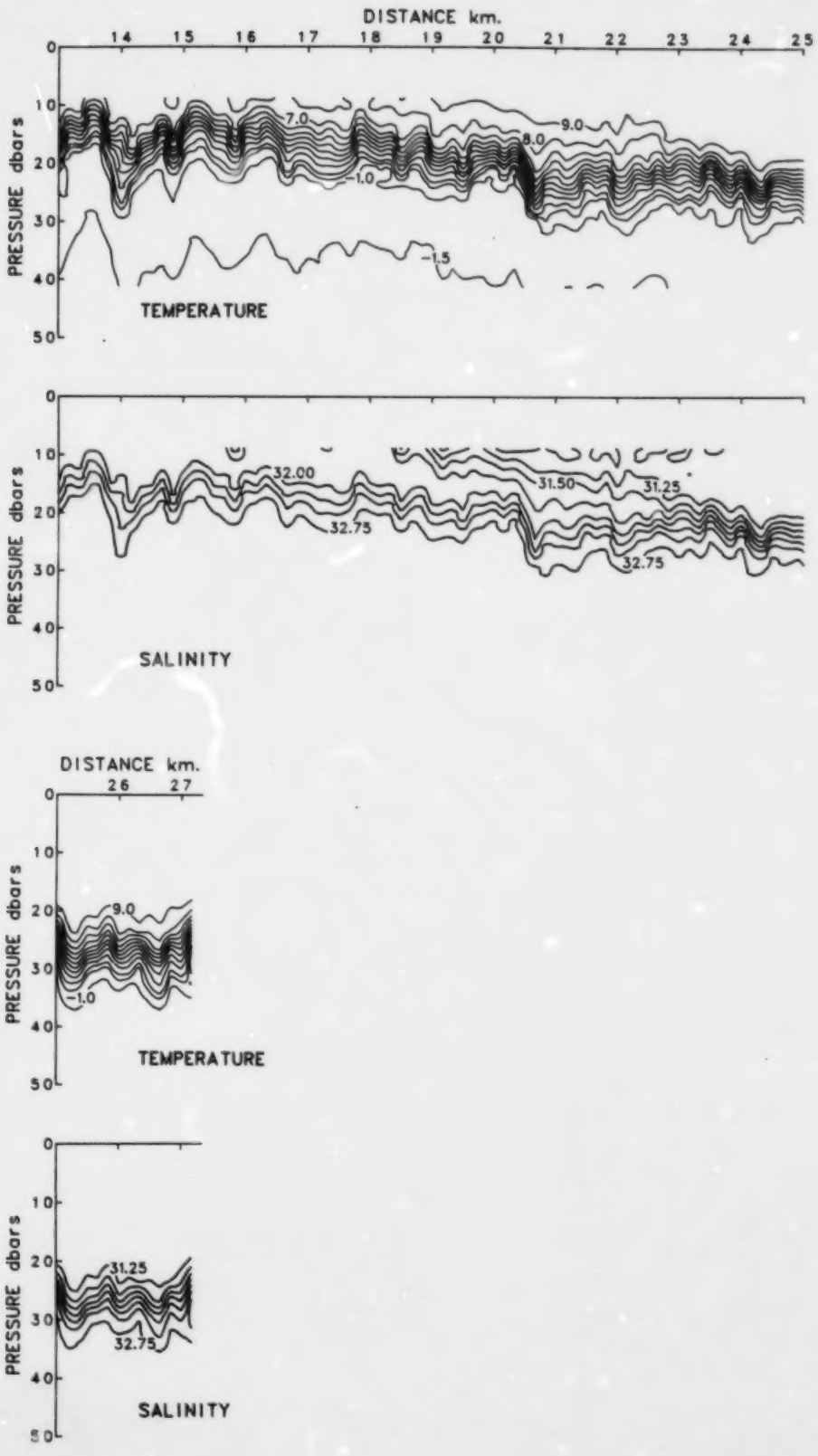

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
7.0
9.0
8.0
1.0
1.5
TEMPERATURE
32.00
31.50
31.25
32.75
32.75
SALINITY
DISTANCE km.
26 27
9.0
1.0
TEMPERATURE
31.25
32.75
SALINITY

Fig. 211

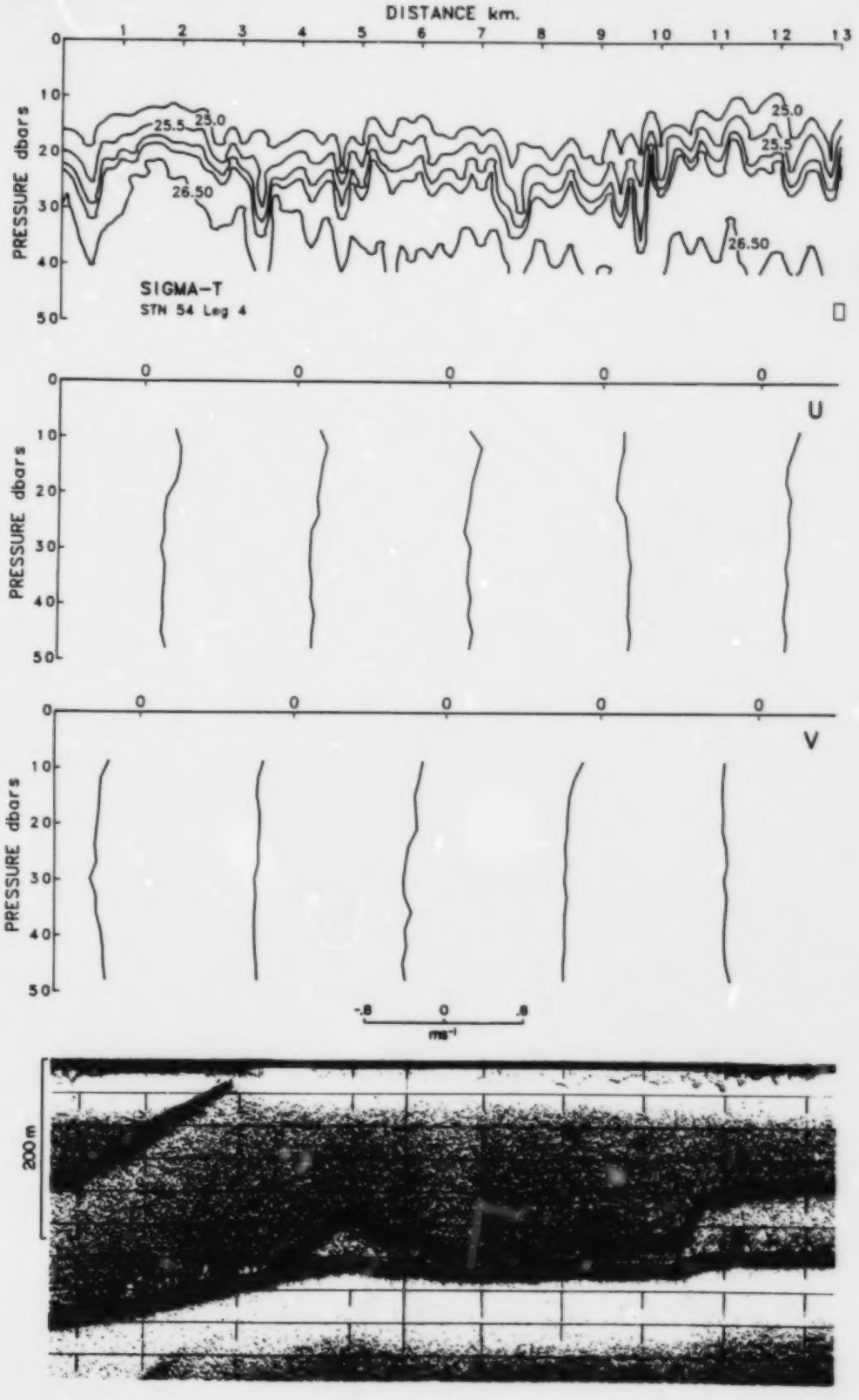

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.5
25.0
26.50
25.0
25.5
26.50
SIGMA-T
STN 54 Leg 4
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 212

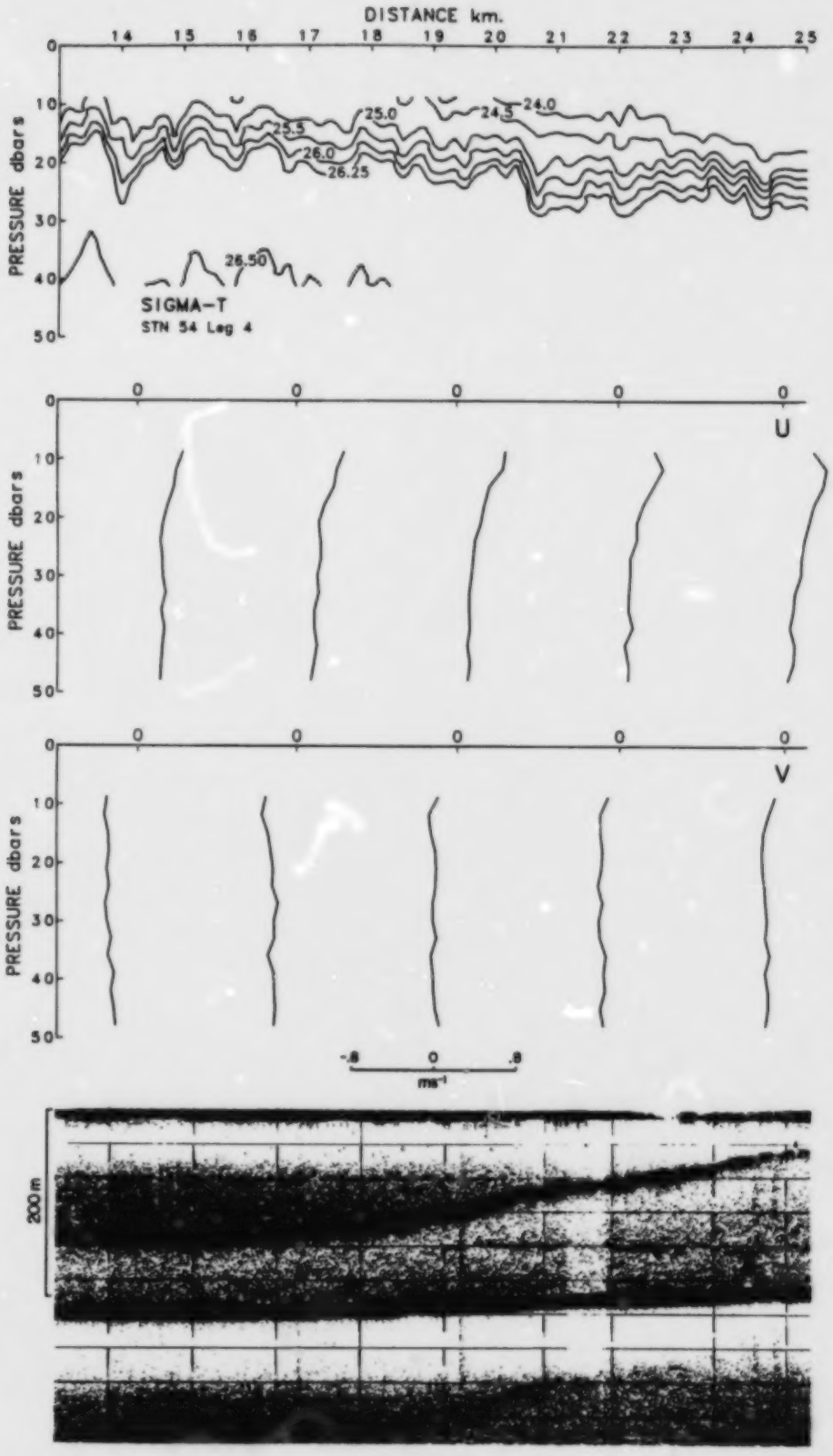

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
25.0
24.5
24.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 54 Leg 4
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹
200 m

Fig. 213

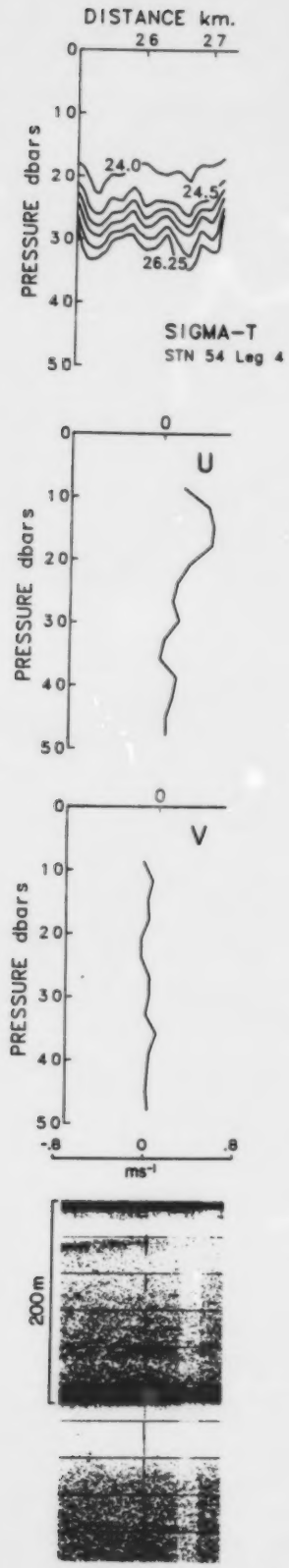

DISTANCE km.
26
27
0
10
20
30
40
50
PRESSURE dbars
24.0
24.5
26.25
SIGMA-T
STN 54 Leg 4
0
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 214

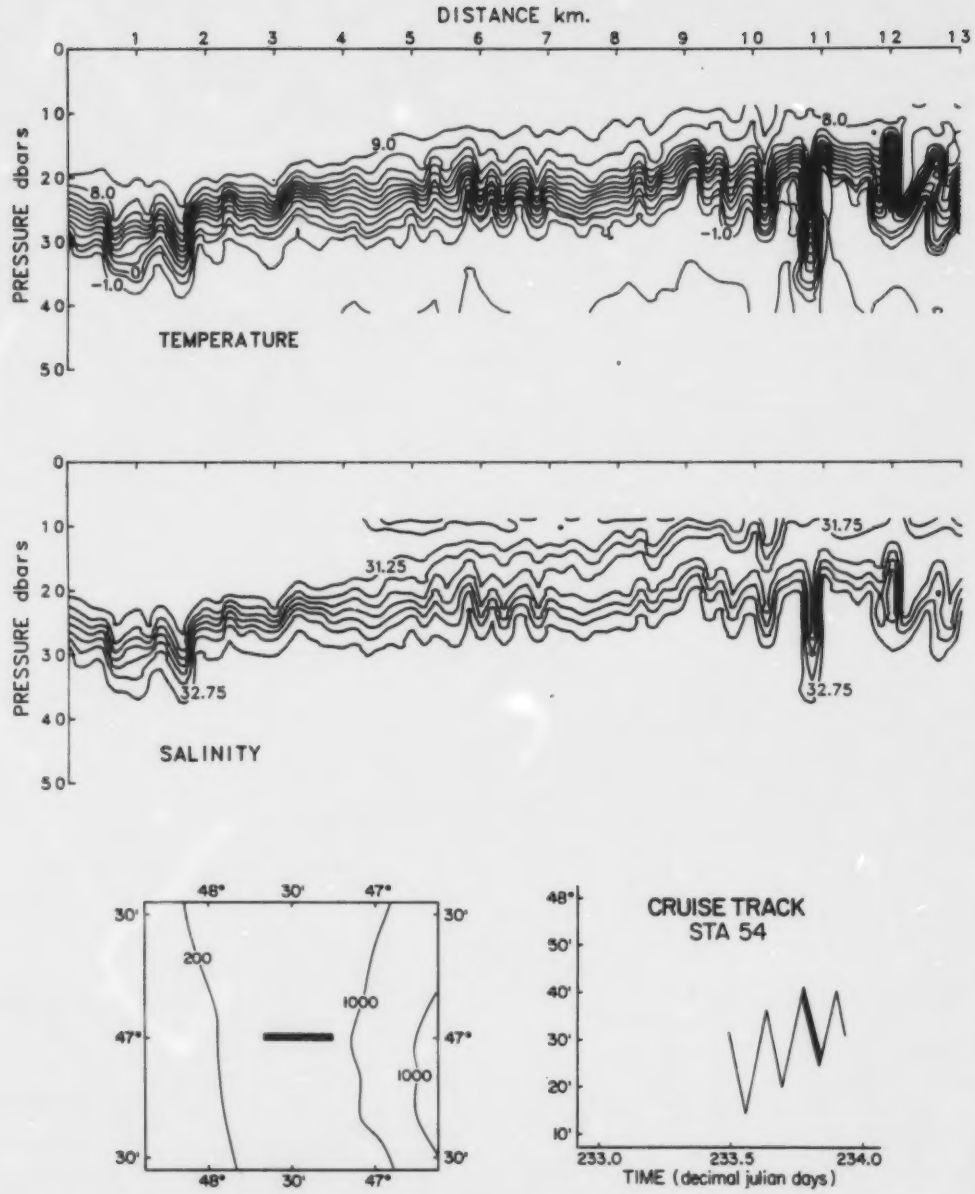

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
8.0
-1.0
-1.0
TEMPERATURE
31.75
31.25
32.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 54
233.0
233.5
234.0
TIME (decimal julian days)

Fig. 215

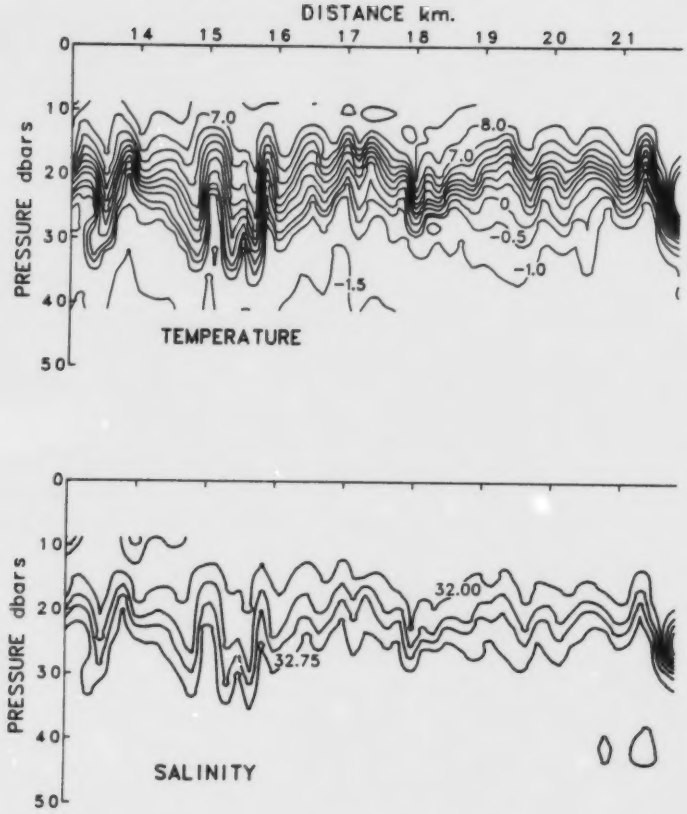

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
7.0
8.0
7.0
-0.5
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.00
32.75
SALINITY

Fig. 216

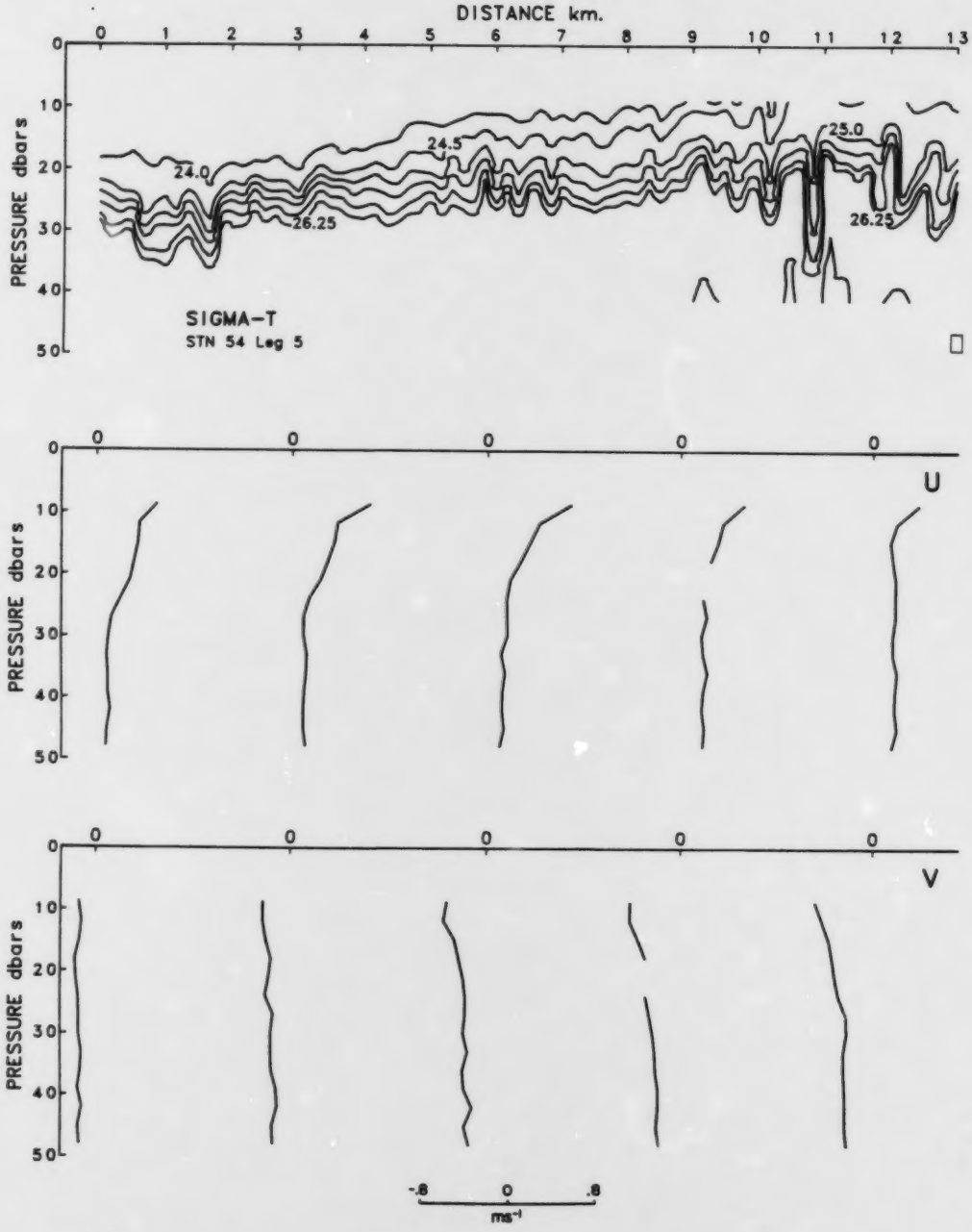

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
25.0
26.25
26.25
SIGMA-T
STN 54 Leg 5
U
0 0 0 0 0
U
PRESSURE dbars
0 10 20 30 40 50
0 0 0 0 0
V
PRESSURE dbars
0 10 20 30 40 50
-.8 0 .8
ms⁻¹

Fig. 217

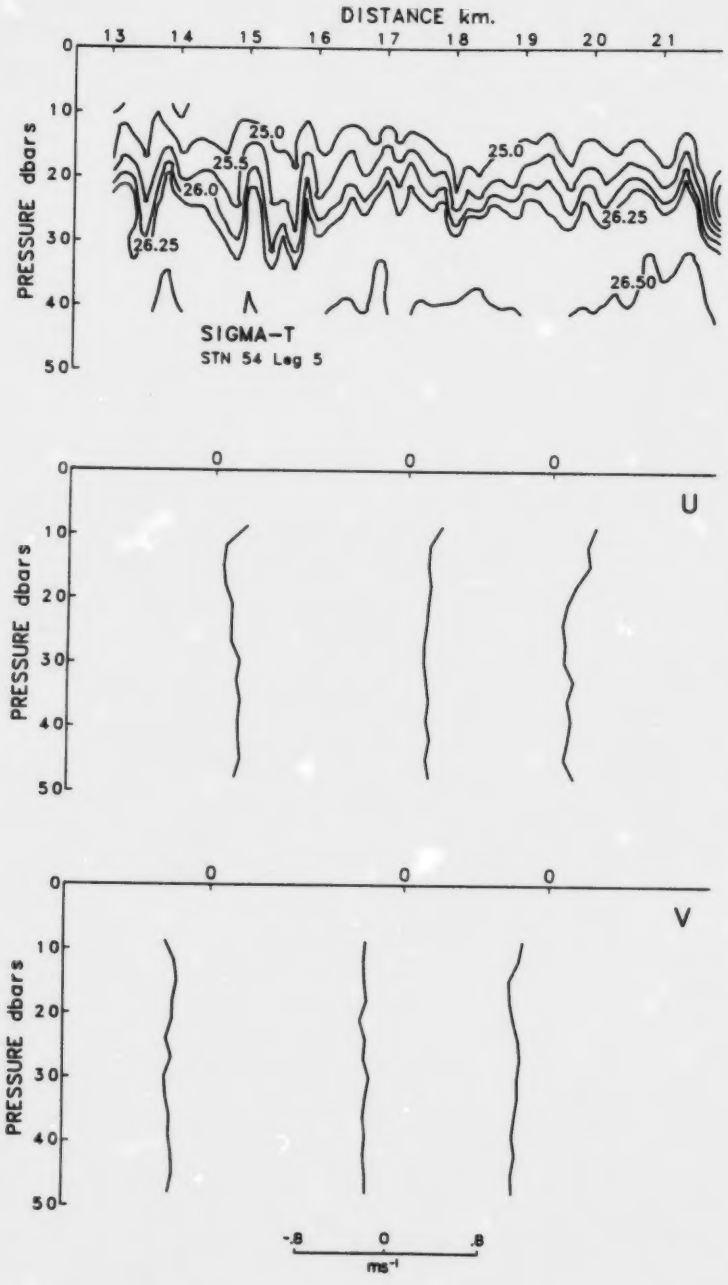
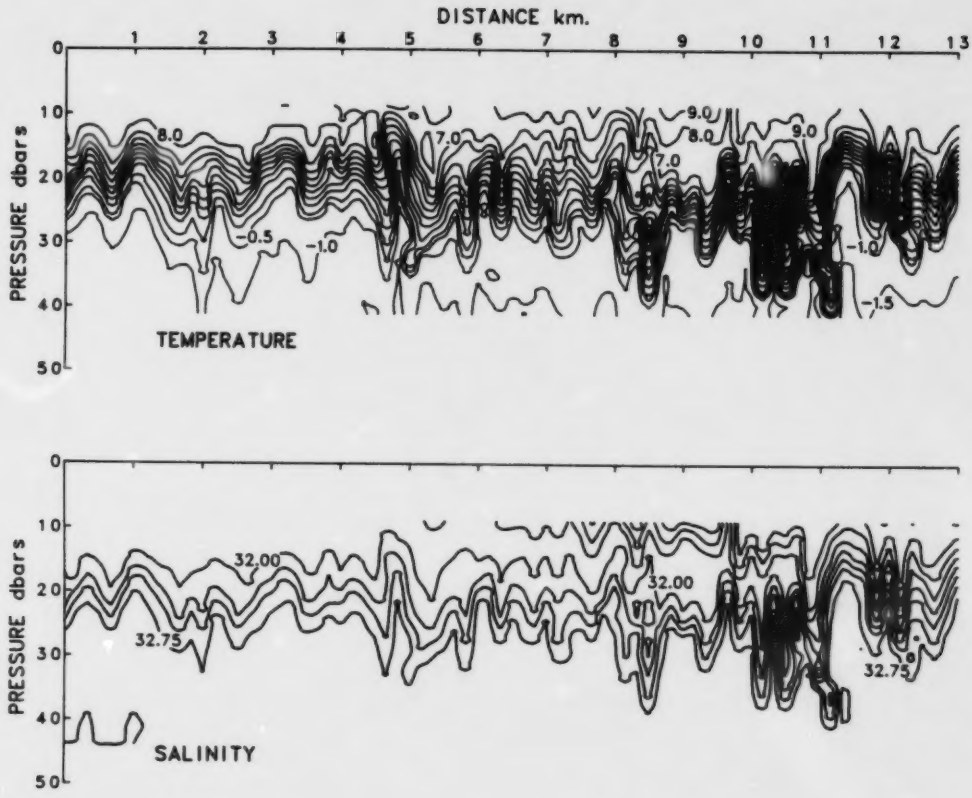

DISTANCE km.
13 14 15 16 17 18 19 20 21
PRESSURE dbars
0 10 20 30 40 50
V
25.0
25.5
26.0
26.25
25.0
26.25
26.50
SIGMA-T
STN 54 Leg 5
U
0 0 0
V
0 0 0
-.8 0 .8
ms⁻¹

Fig. 218


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
8.0
7.0
9.0
8.0
7.0
9.0
-0.5
-1.0
-1.0
-1.5
TEMPERATURE
PRESSURE dbars
32.00
32.00
32.75
32.75
SALINITY

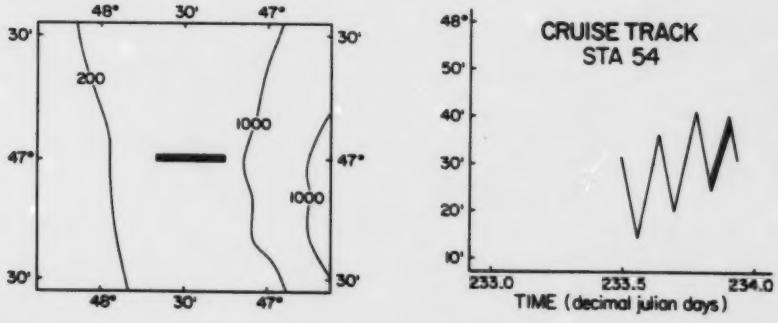

48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 54
233.0 233.5 234.0
TIME (decimal julian days)

Fig. 219

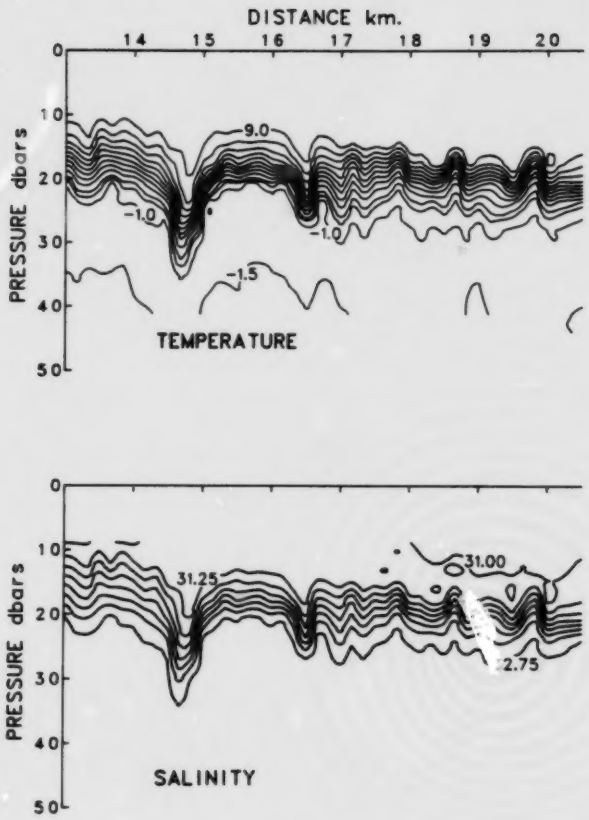

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.0
-1.5
TEMPERATURE
31.25
31.00
2.75
SALINITY

Fig. 220

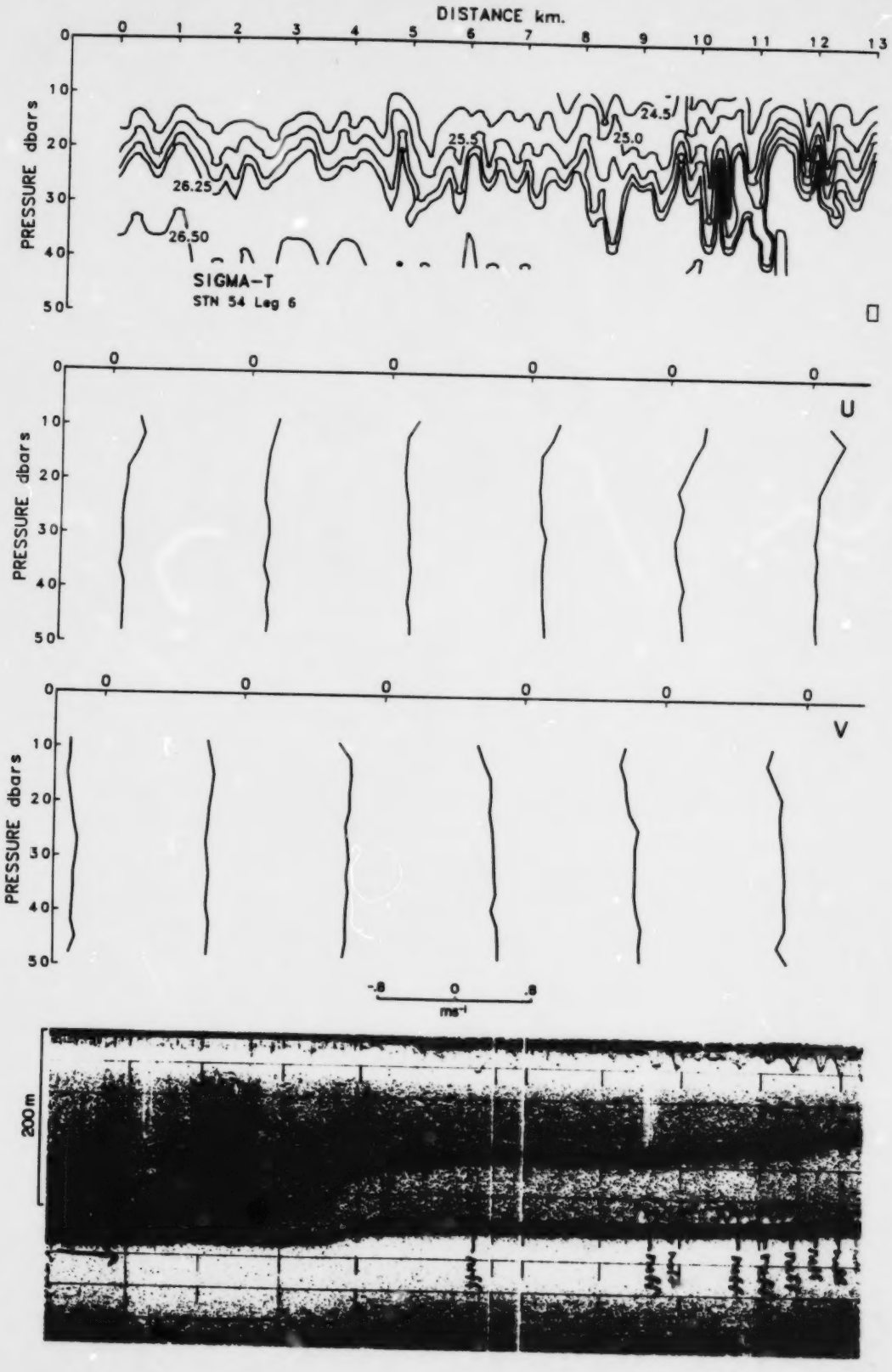

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.0
25.5
26.25
26.50
SIGMA-T
STN 54 Leg 6
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 221

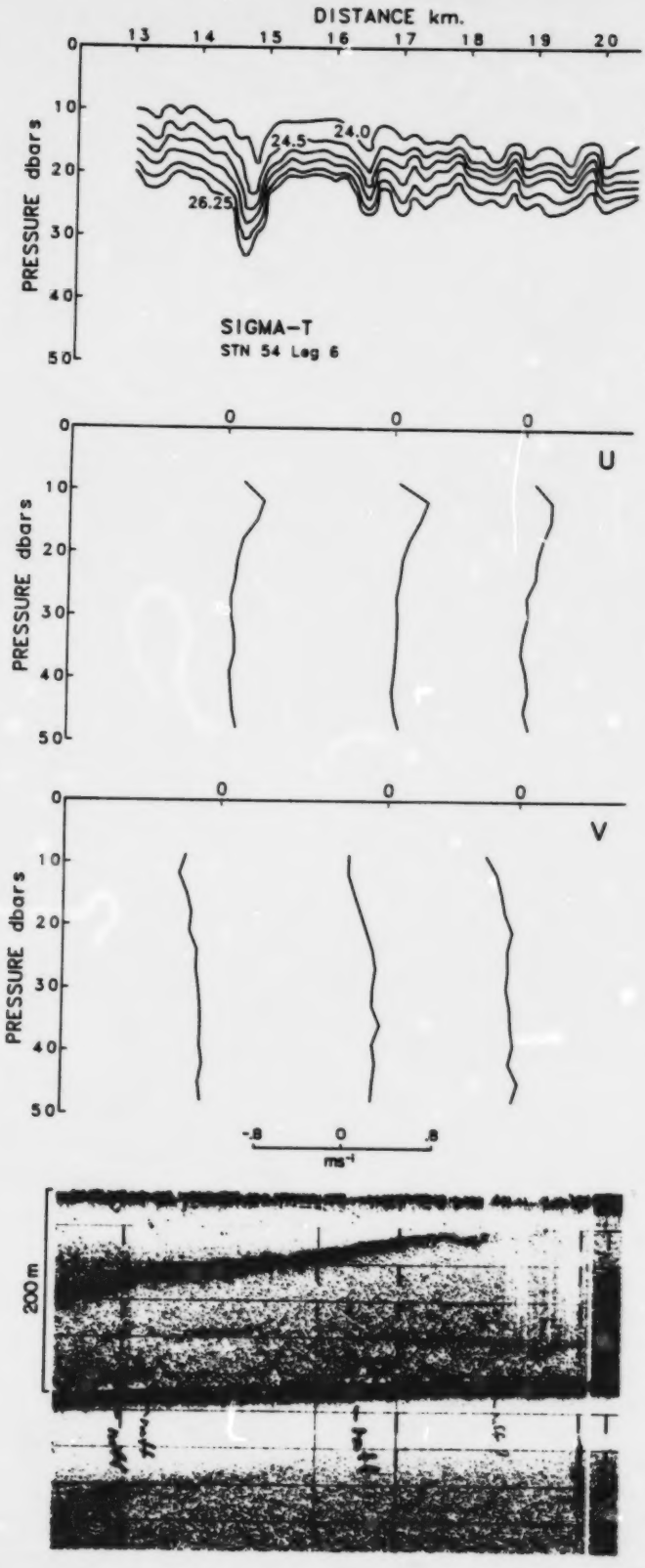

DISTANCE km.
13 14 15 16 17 18 19 20
PRESSURE dbars
0 10 20 30 40 50
24.5
24.0
26.25
SIGMA-T
STN 54 Leg 6
U
V
0 0 0
-.8 0 .8
ms⁻¹
200m
T

Fig. 222

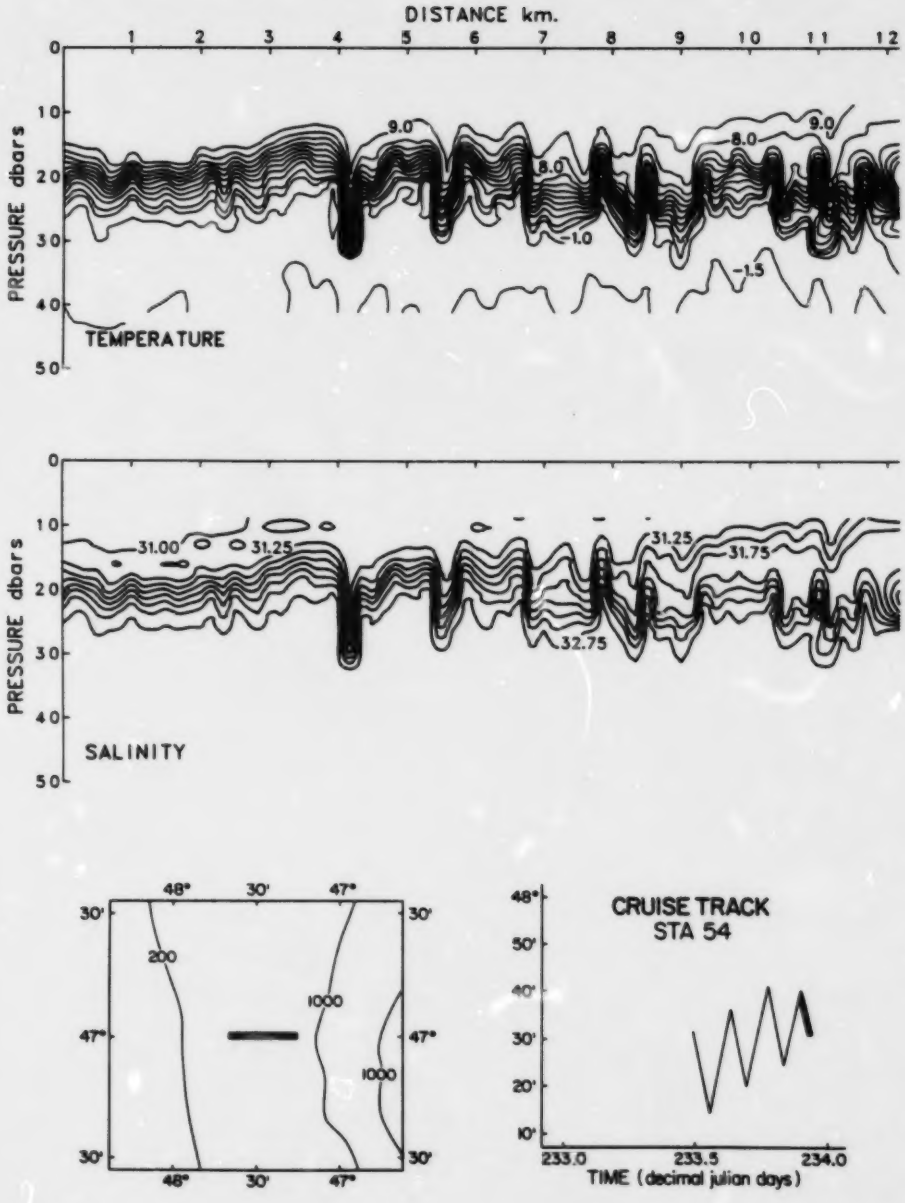

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
8.0
9.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
31.25
31.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 54
50'
40'
30'
20'
10'
233.0
233.5
234.0
TIME (decimal julian days)

Fig. 223

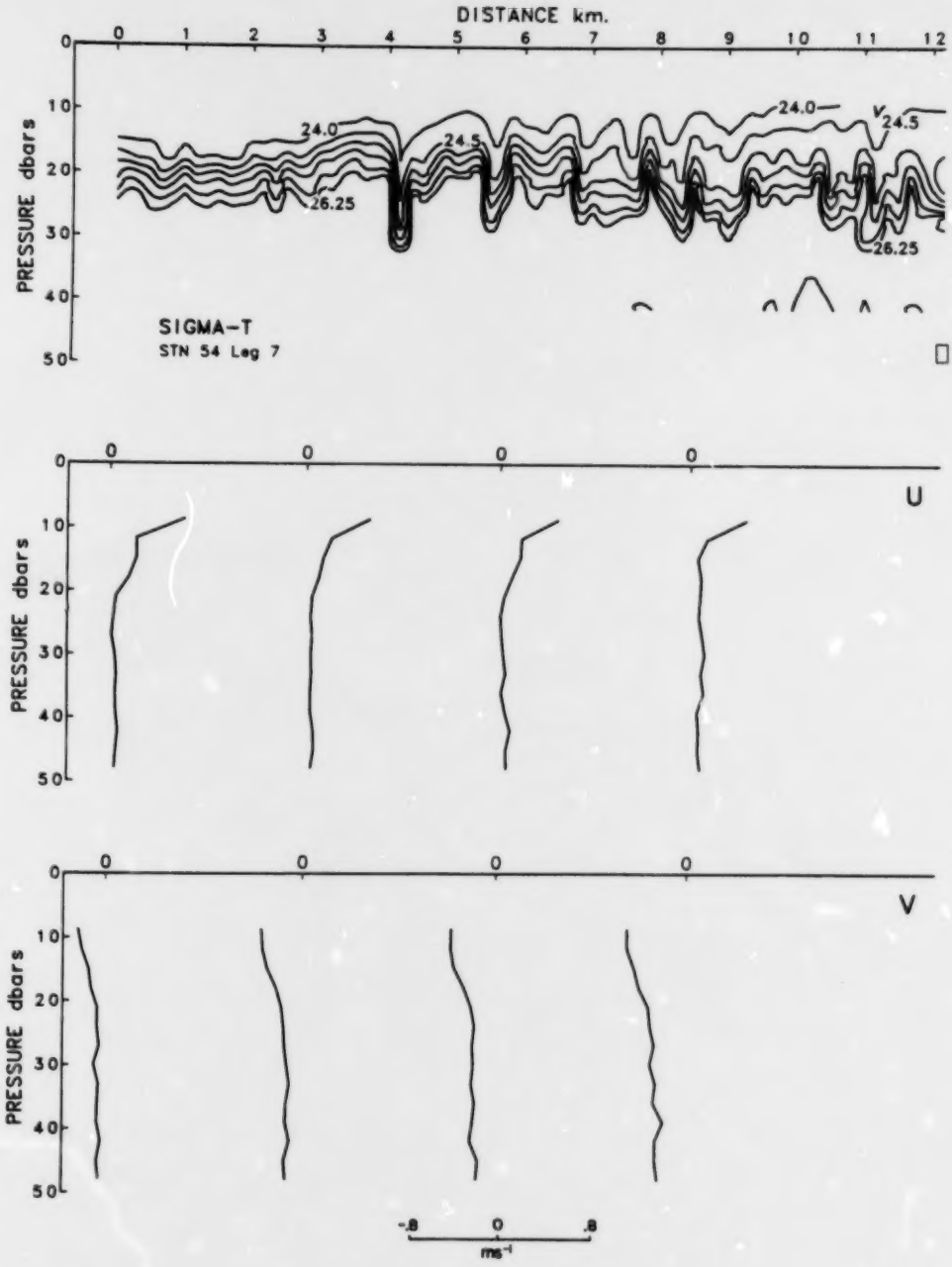

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
26.25
SIGMA-T
STN 54 Leg 7
U
V
0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 224

Figures 225-262

BATFISH station 55; 9 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

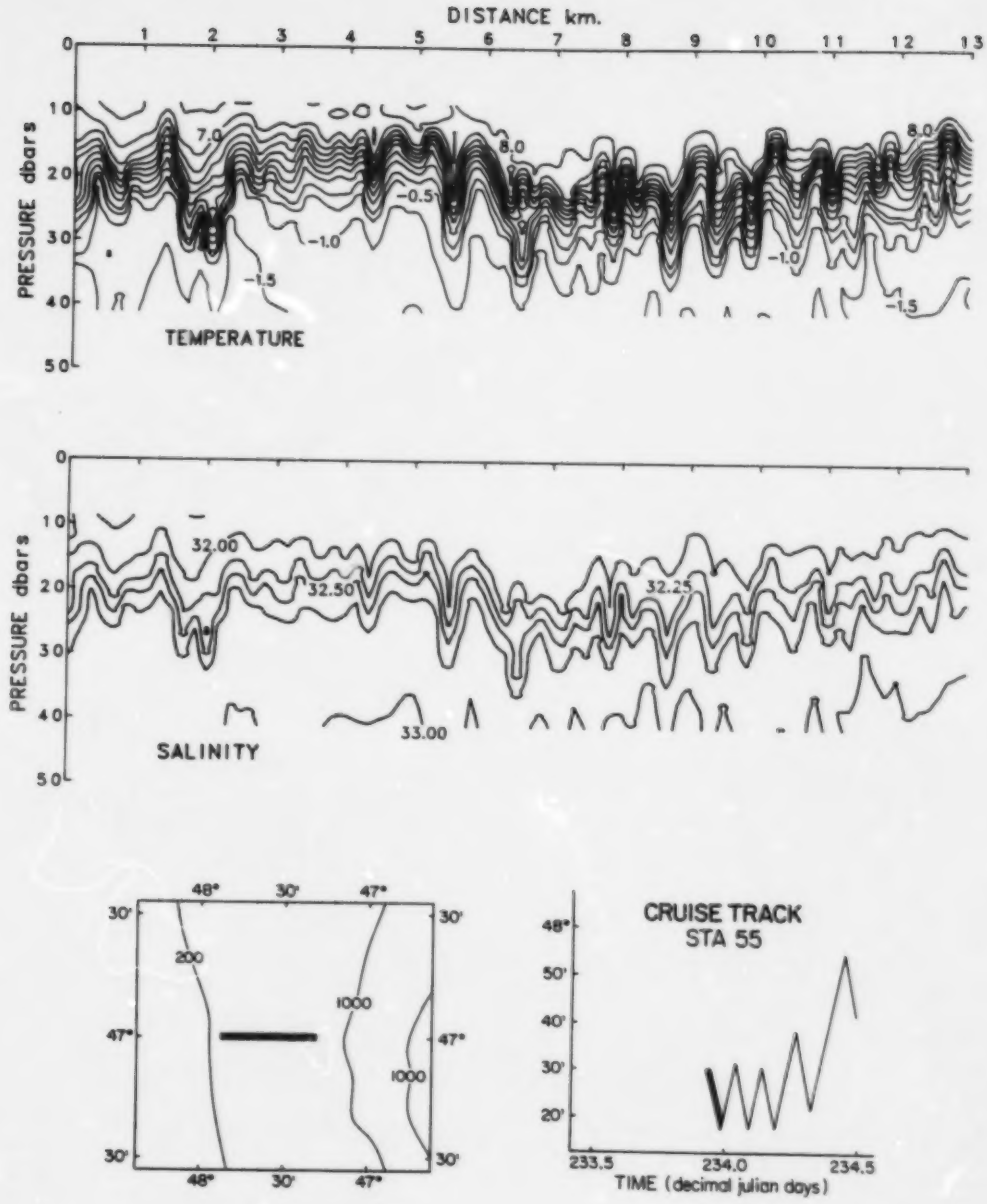

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
7.0
8.0
-0.5
-1.0
-1.5
TEMPERATURE
32.00
32.50
32.25
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 55
50'
40'
20'
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 225

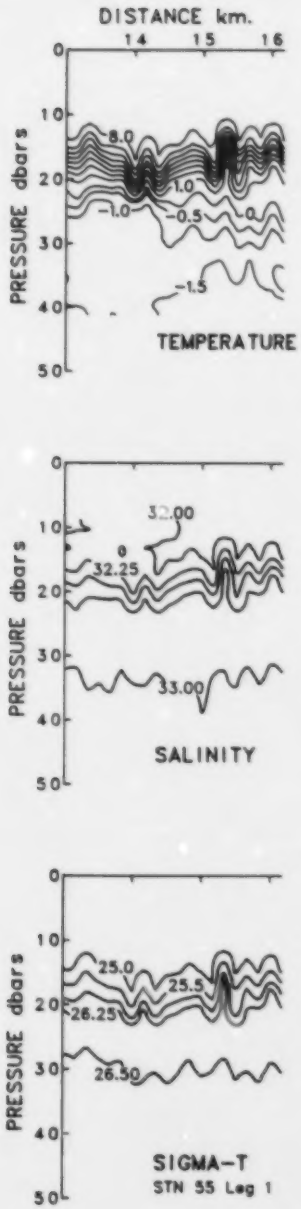

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
8.0
1.0
-1.0
-0.5
0
-1.5
TEMPERATURE
32.00
32.25
33.00
SALINITY
25.0
25.5
26.25
26.50
SIGMA-T
STN 55 Leg 1

Fig. 226

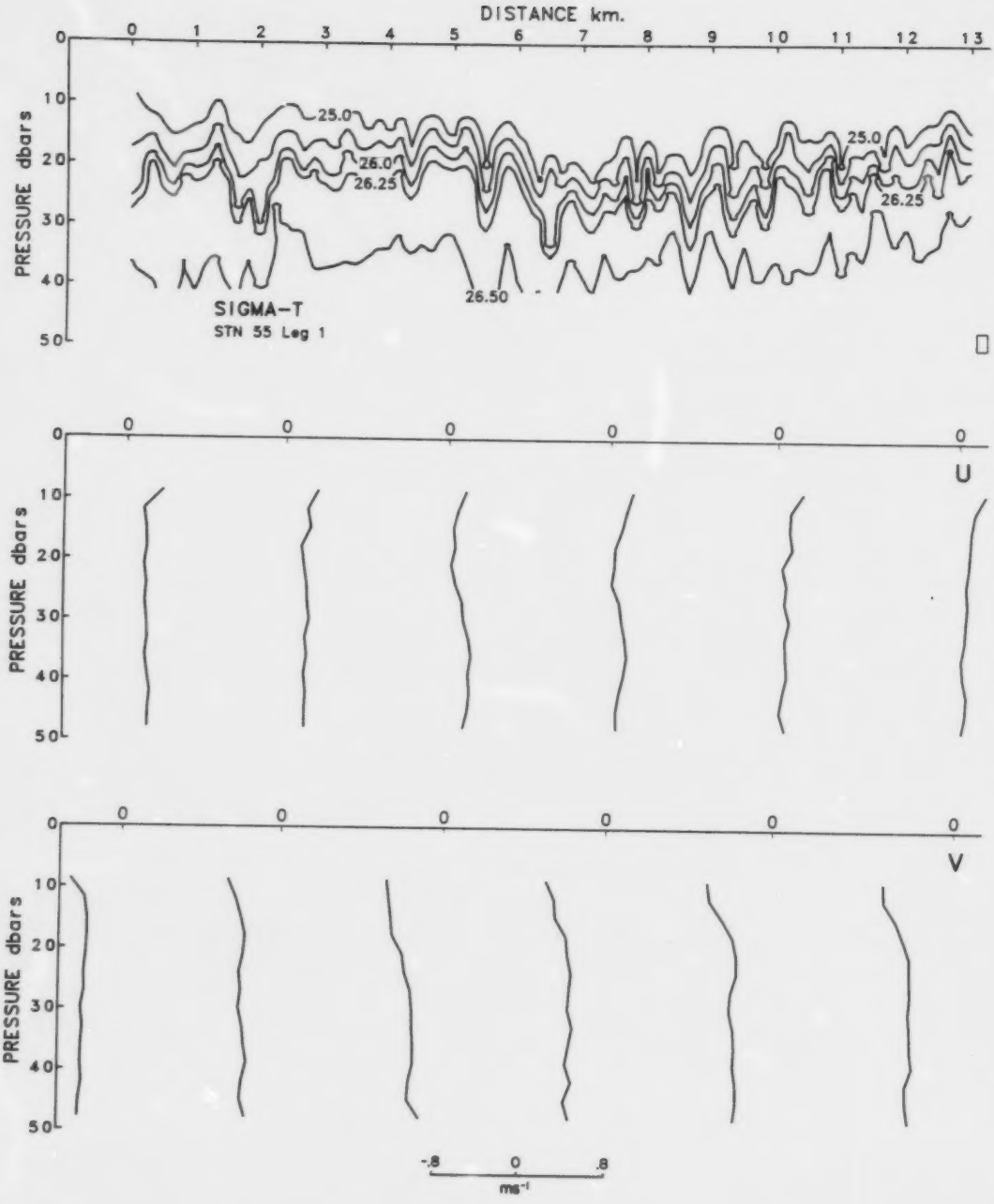

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
26.0
26.25
26.50
25.0
26.25
SIGMA-T
STN 55 Leg 1
0 0 0 0 0 0
U
0 0 0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 227

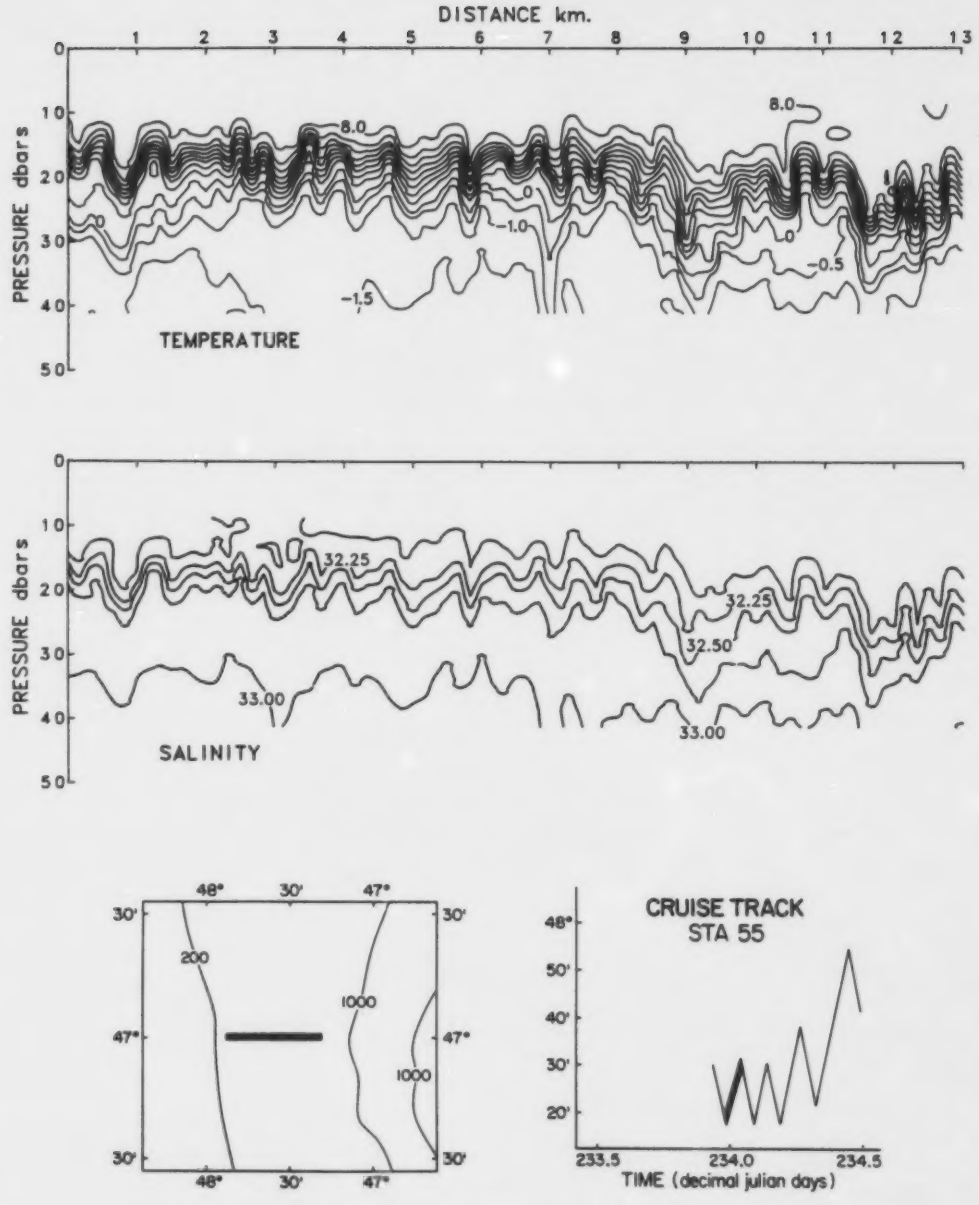

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
8.0
8.0
0
-1.0
0
-0.5
-1.5
TEMPERATURE
32.25
32.25
32.50
33.00
33.00
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 55
48°
50'
40'
30'
20'
233.5 234.0 234.5
TIME (decimal julian days)

Fig. 228

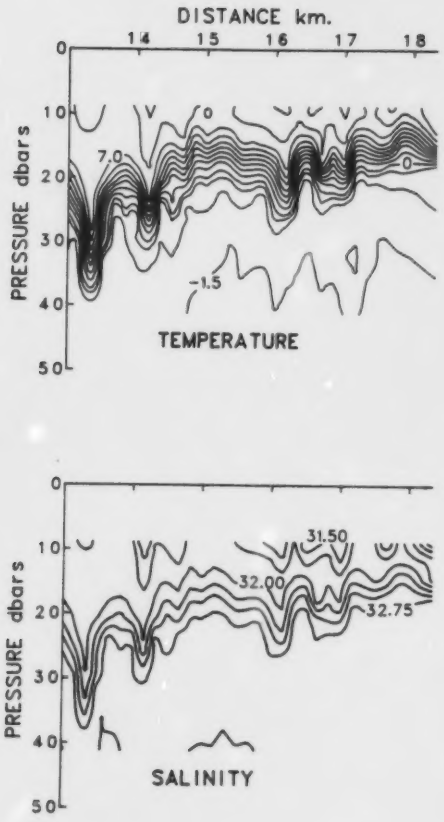

DISTANCE km.
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
7.0
-1.5
TEMPERATURE
31.50
32.00
32.75
SALINITY

Fig. 229

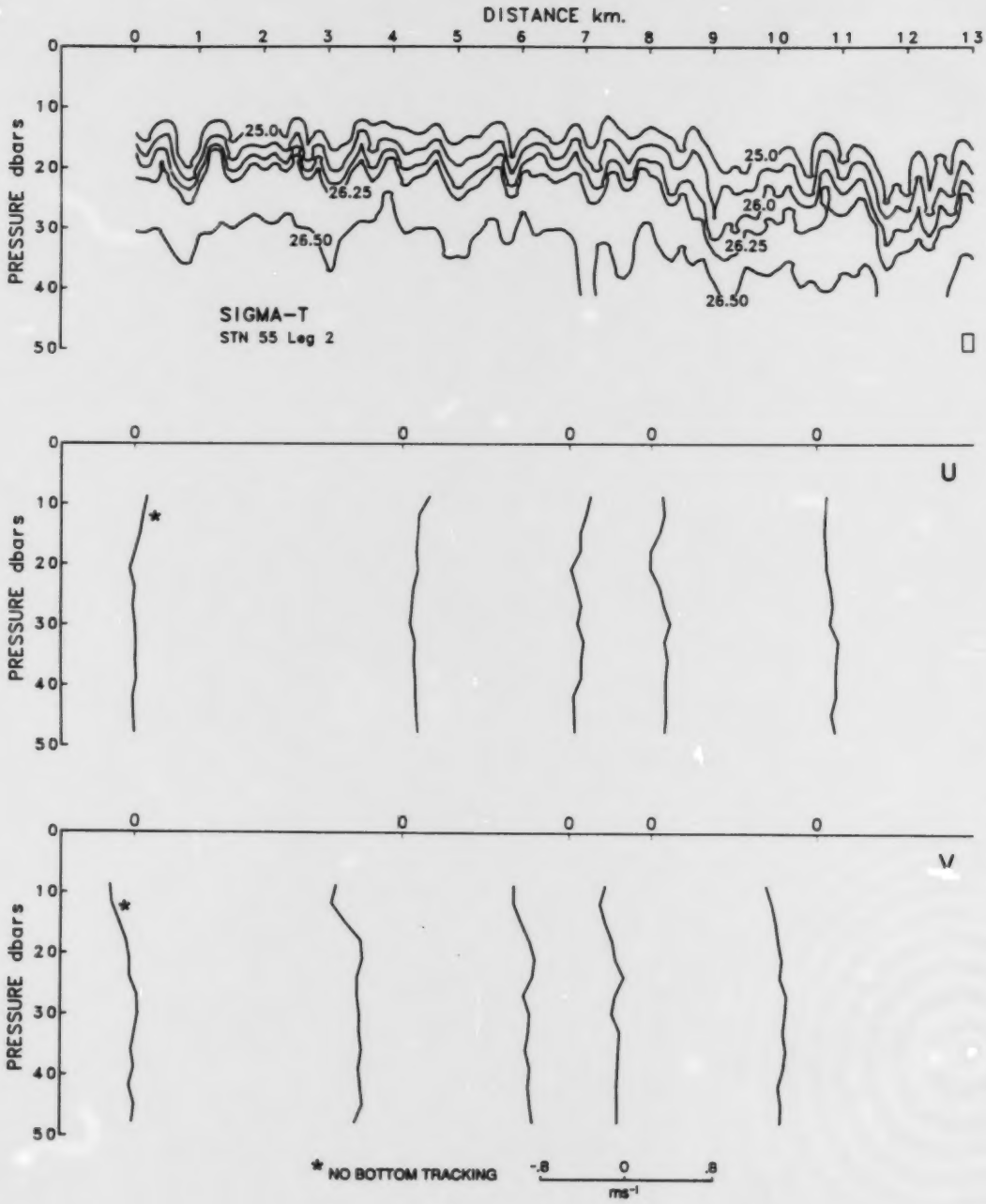

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.25
26.50
25.0
26.0
26.25
26.50
SIGMA-T
STN 55 Leg 2
U
V
0 0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 230

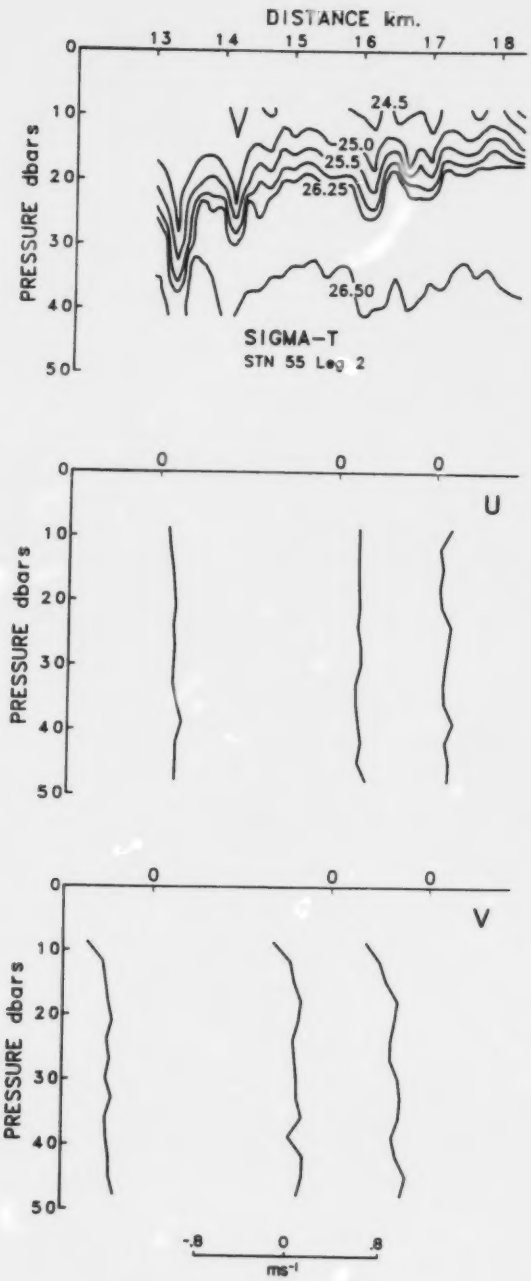

DISTANCE km.
13
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
V
24.5
25.0
25.5
26.25
26.50
SIGMA-T
STN 55 Leg 2
U
0
0
0
V
-.8
0
.8
ms⁻¹

Fig. 231

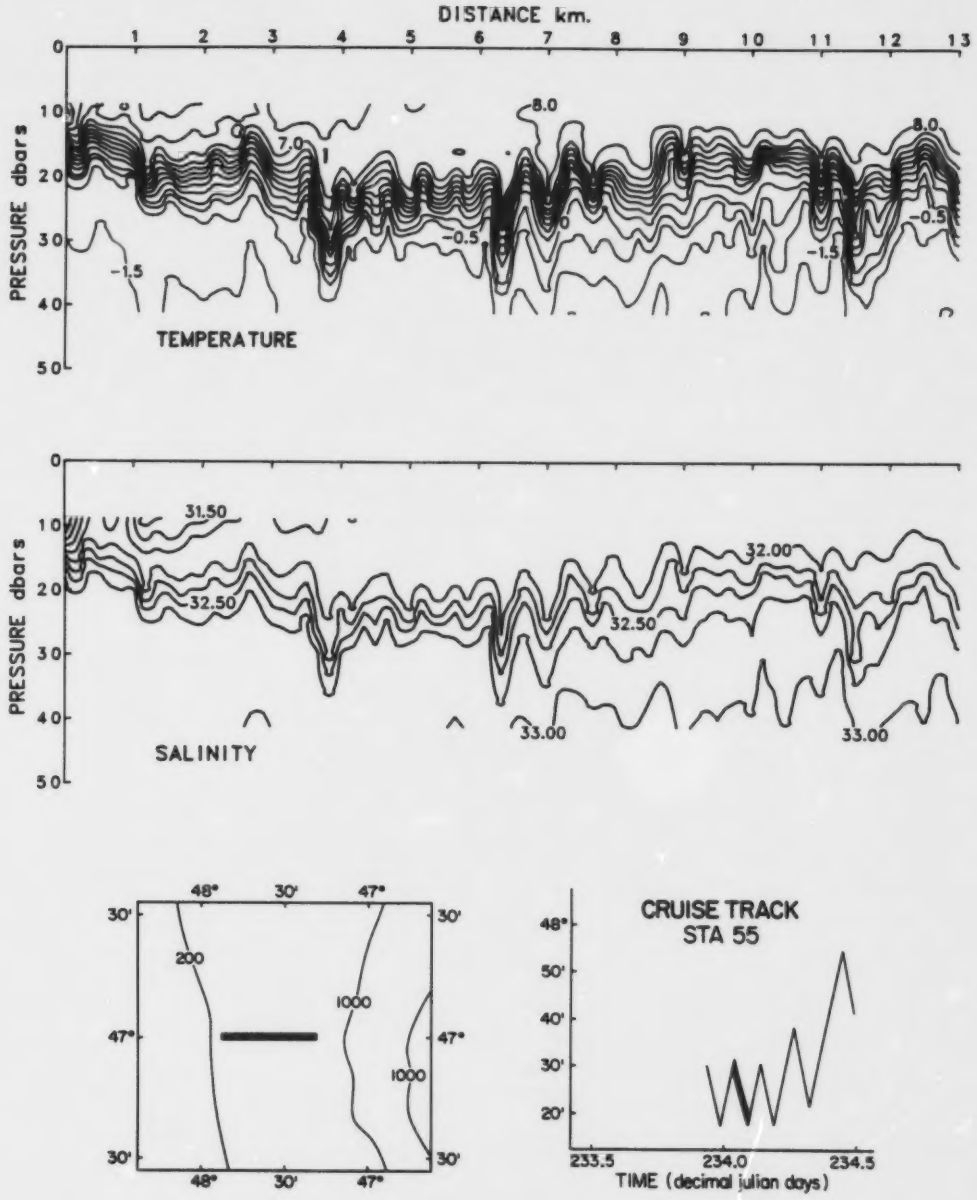

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-0.5
-1.5
TEMPERATURE
31.50
32.50
32.00
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 55
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 232

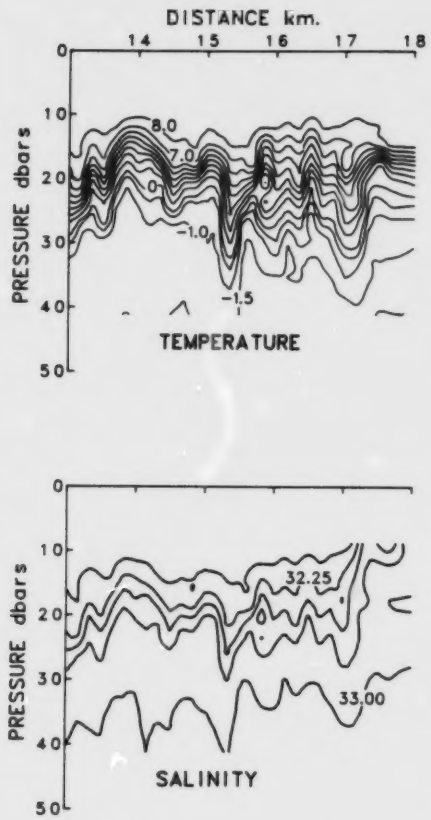

DISTANCE km.
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
0
-1.0
-1.5
TEMPERATURE
32.25
33.00
SALINITY

Fig. 233

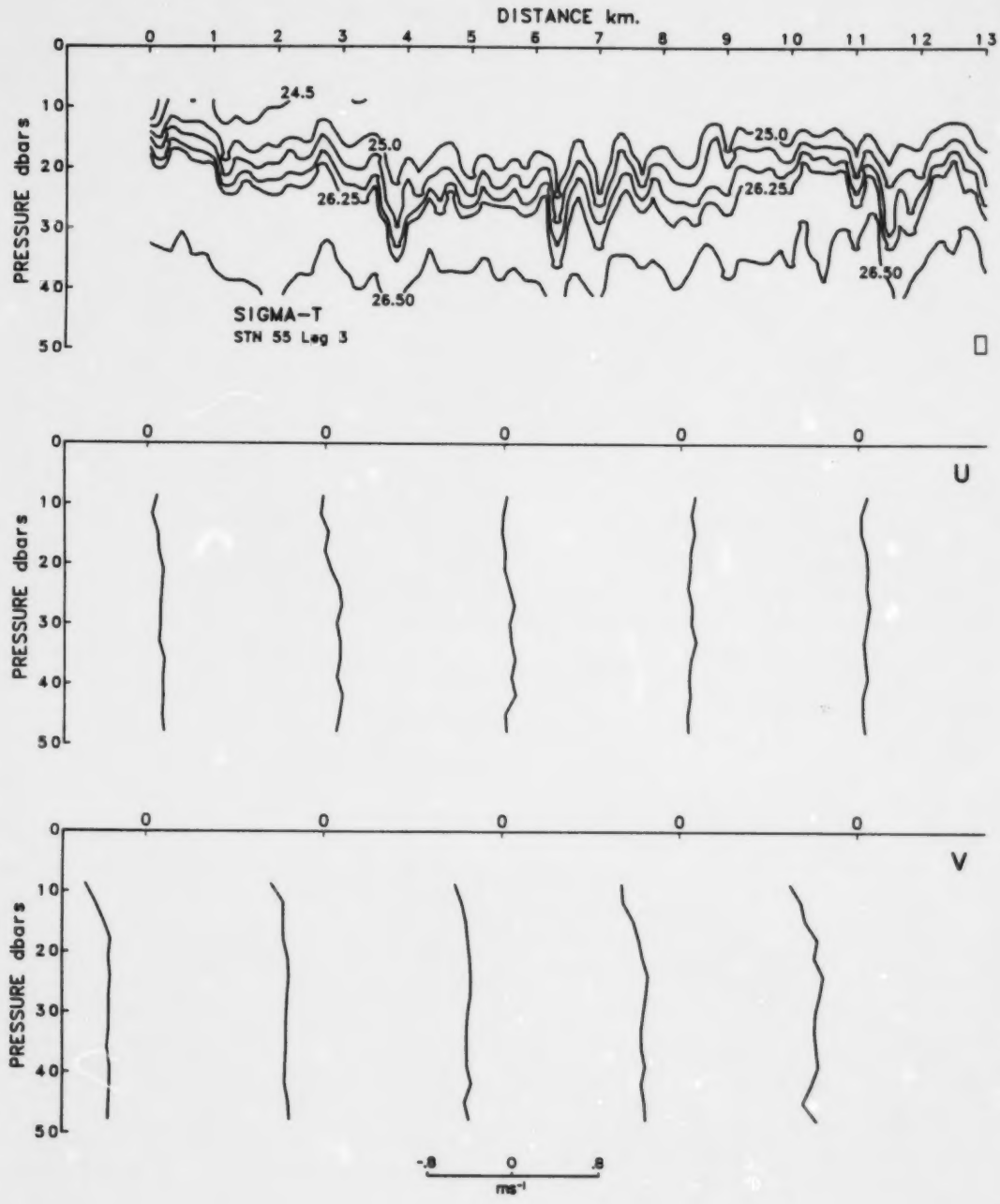

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.25
26.50
SIGMA-T
STN 55 Leg 3
U
V
-.8 0 .8
ms⁻¹

Fig. 234

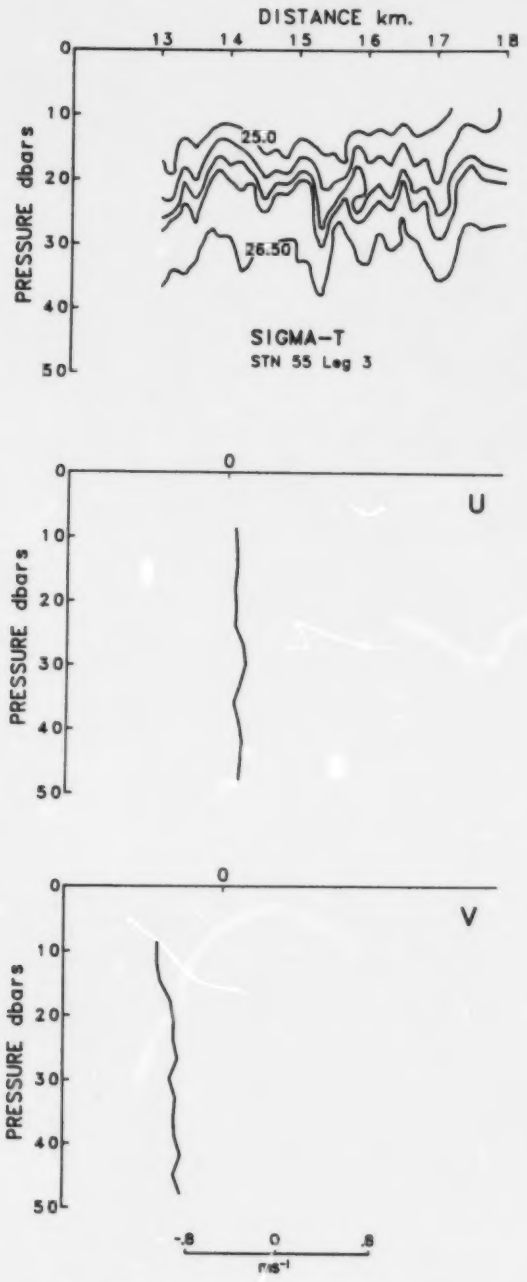

DISTANCE km.
13
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
25.0
26.50
SIGMA-T
STN 55 Leg 3
0
U
0
10
20
30
40
50
PRESSURE dbars
0
V
0
10
20
30
40
50
PRESSURE dbars
-.8
0
.8
ms-1

Fig. 235

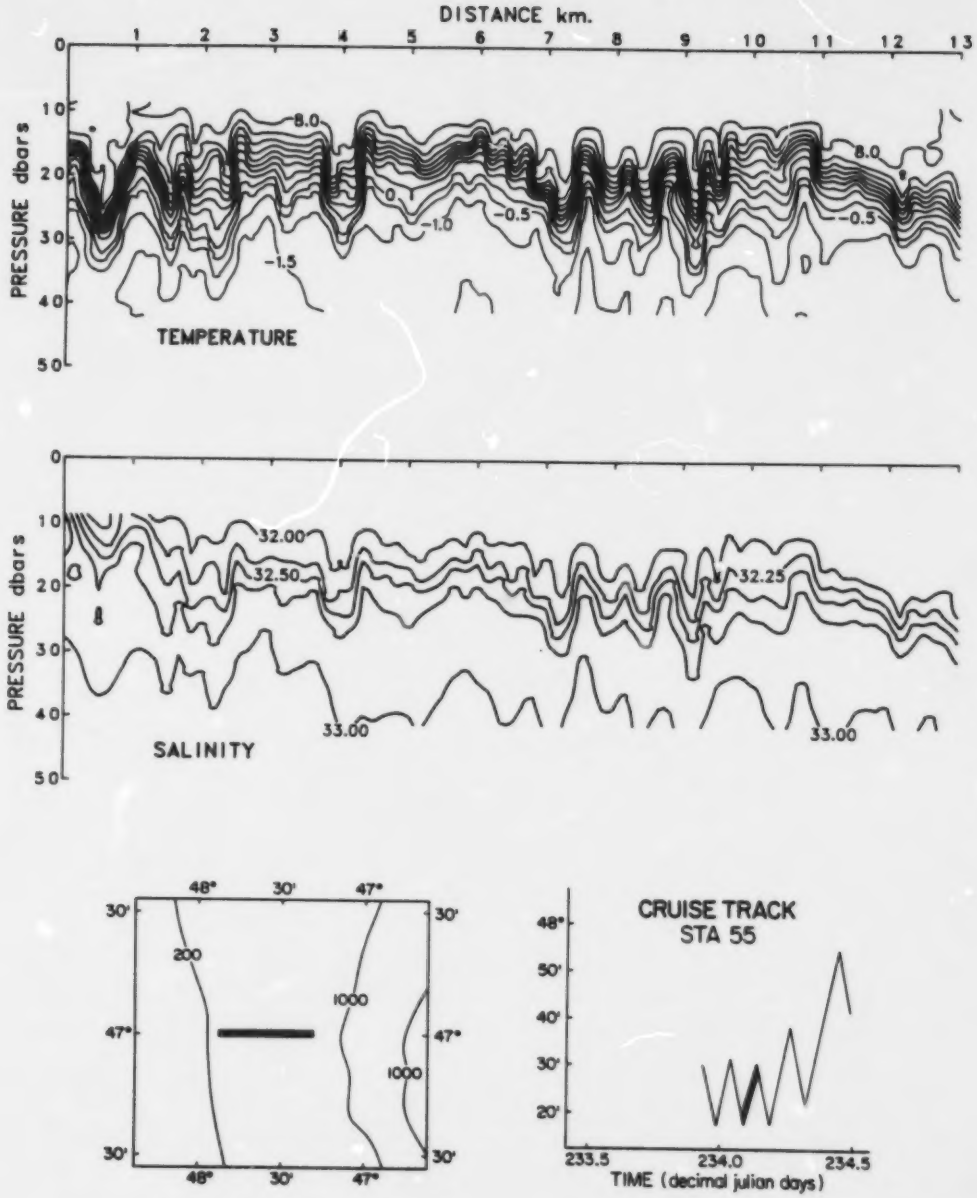

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
8.0
0
-1.0
-0.5
-1.5
8.0
-0.5
TEMPERATURE
32.00
32.50
32.25
33.00
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 55
48°
50'
40'
30'
20'
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 236

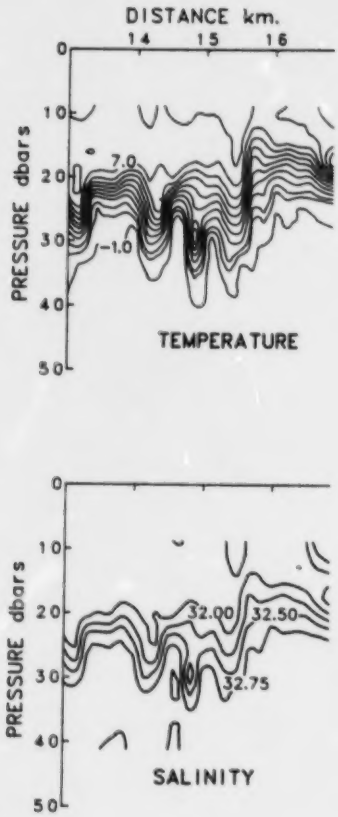

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
7.0
-1.0
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.00
32.50
32.75
SALINITY

Fig. 237

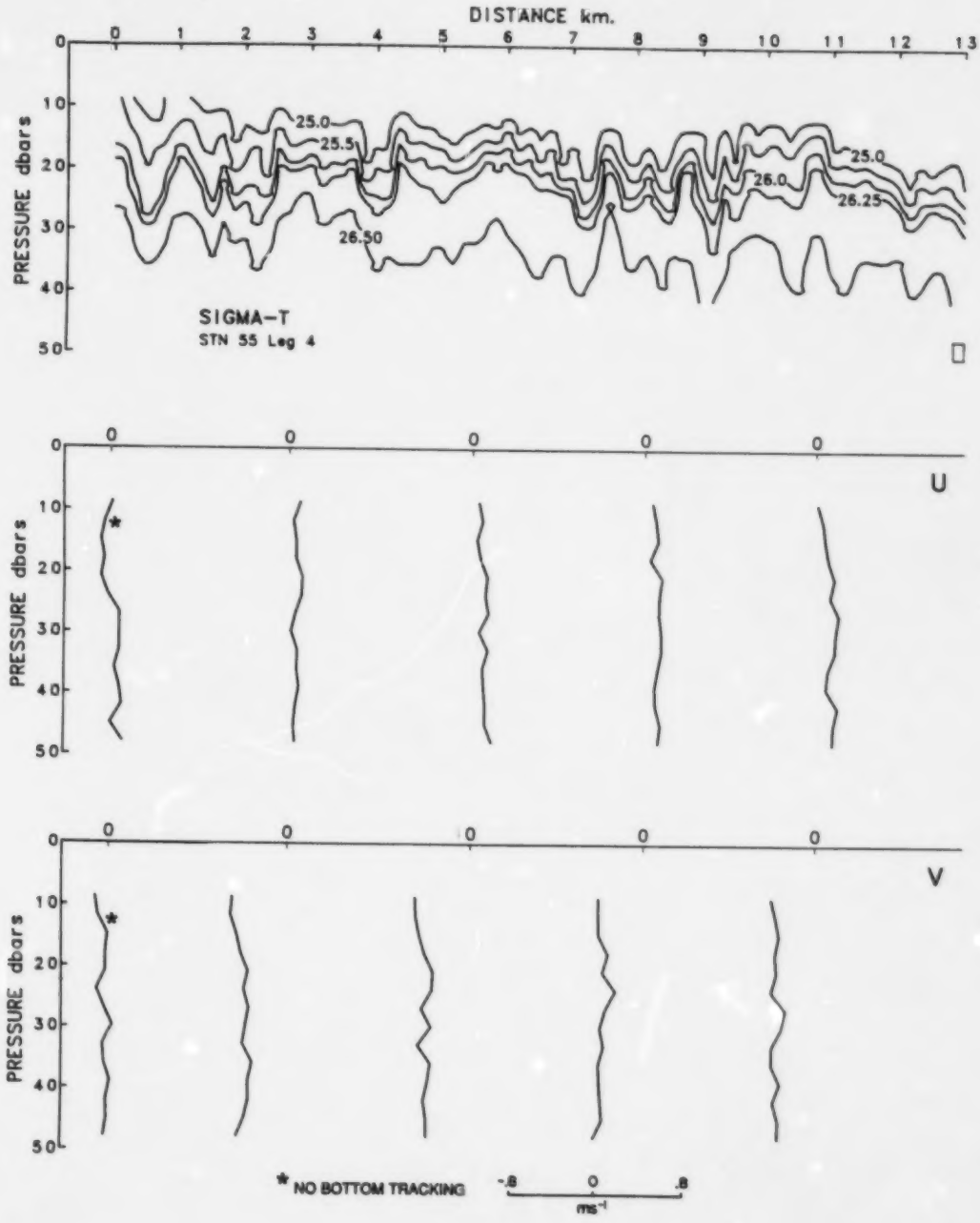

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
25.5
26.50
25.0
26.0
26.25
SIGMA-T
STN 55 Leg 4
U
V
0 0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 238

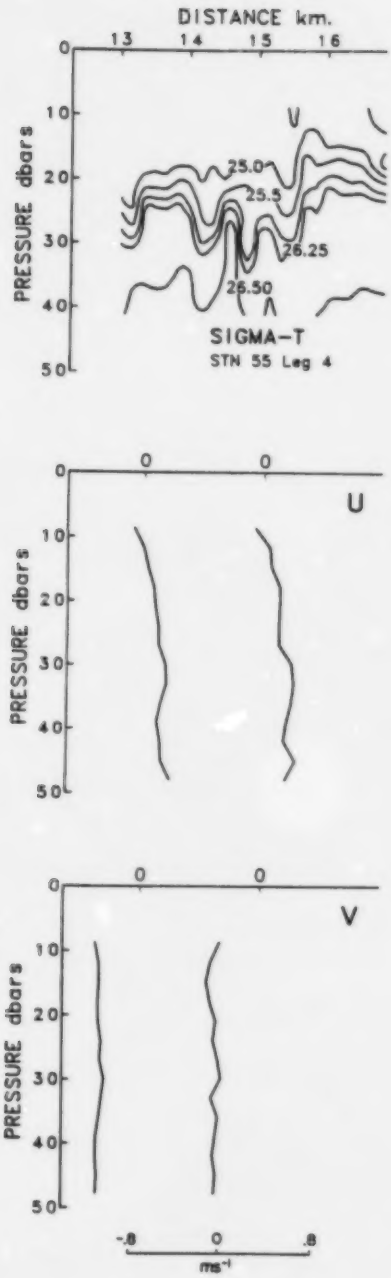

DISTANCE km.
13
14
15
16
0
10
20
30
40
50
PRESSURE dbars
V
25.0
25.5
26.25
26.50
SIGMA-T
STN 55 Leg 4
0
0
U
PRESSURE dbars
0
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 239

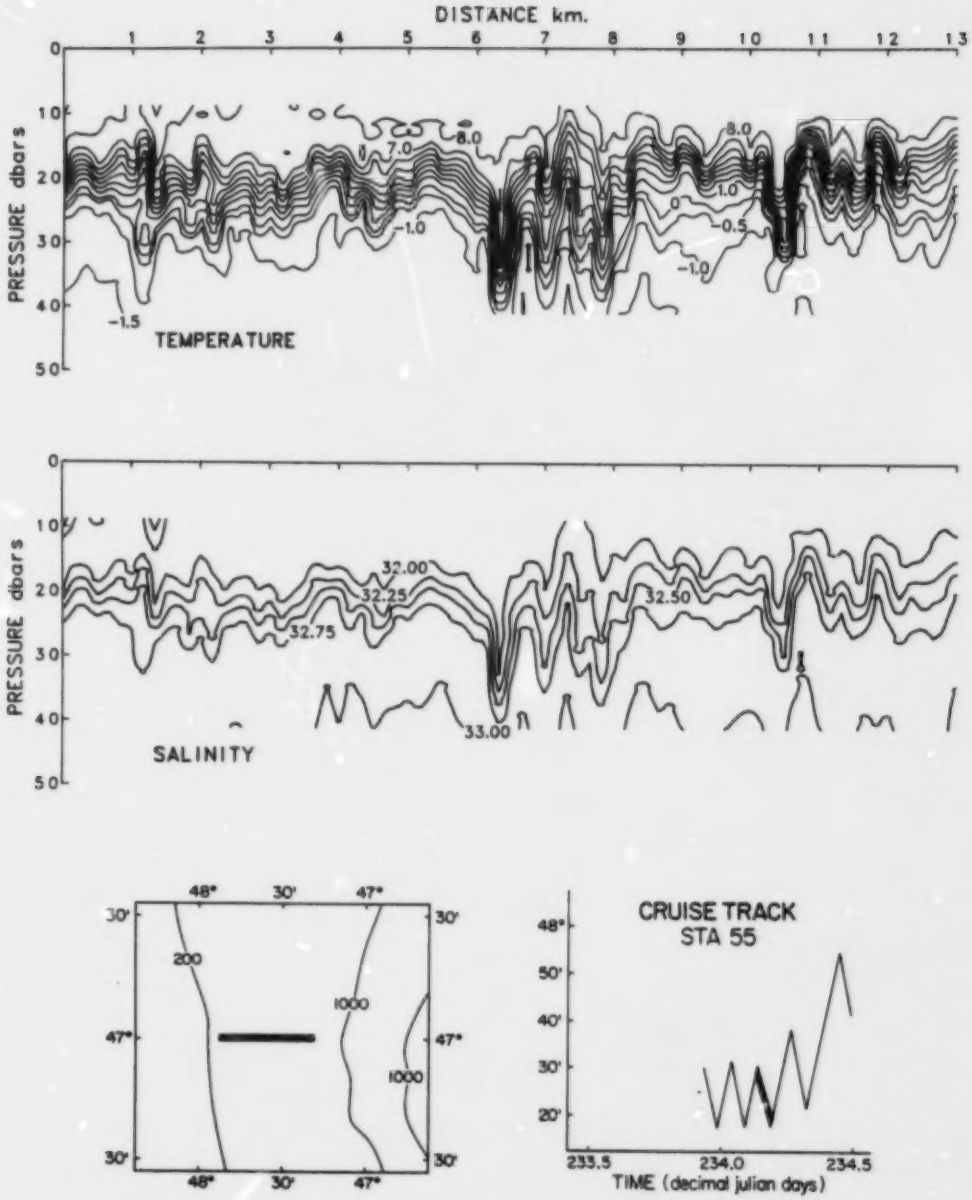

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
8.0
1.0
0
-0.5
-1.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 55
48°
50'
40'
30'
20'
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 240

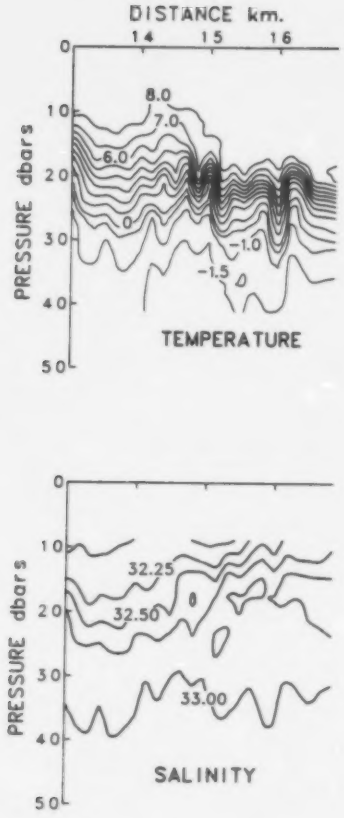

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
6.0
0
-1.0
-1.5
TEMPERATURE
32.25
32.50
33.00
SALINITY

Fig. 241

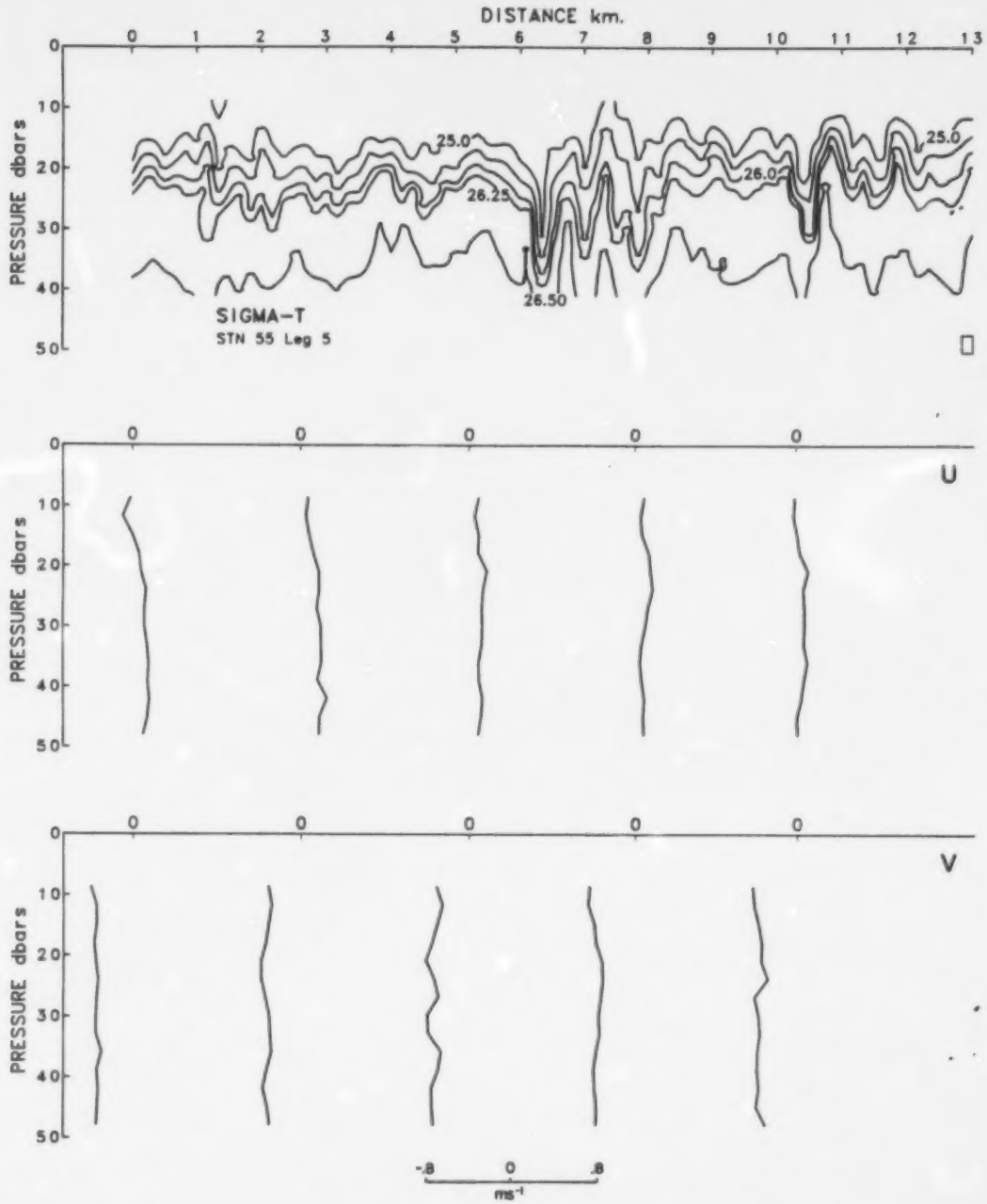

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
V
25.0
26.25
26.50
26.0
25.0
SIGMA-T
STN 55 Leg 5
U
0 0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 242

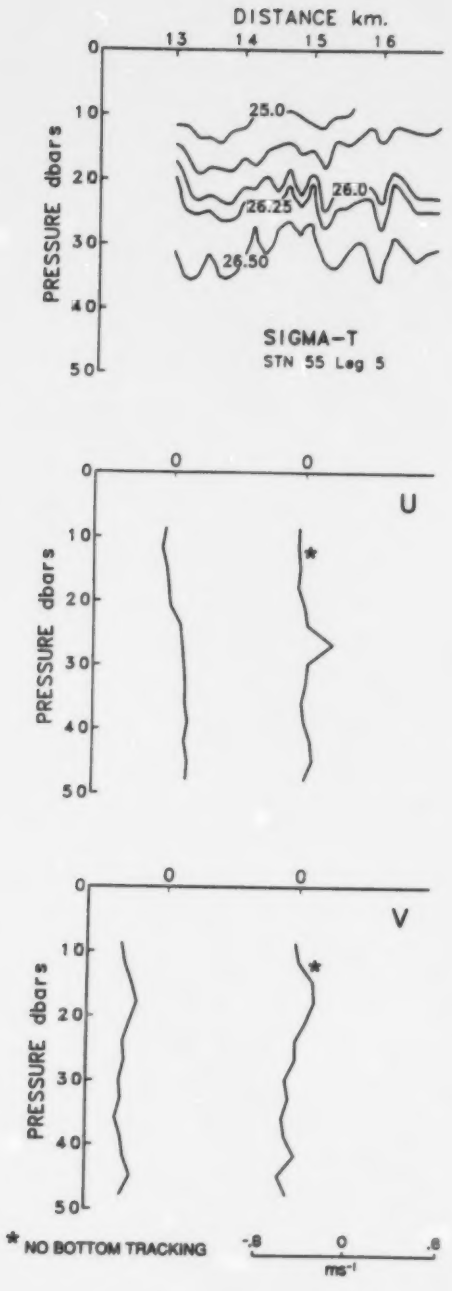

DISTANCE km.
13
14
15
16
0
10
20
30
40
50
PRESSURE dbars
25.0
26.0
26.25
26.50
SIGMA-T
STN 55 Leg 5
0
0
U
PRESSURE dbars
*
V
* NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 243

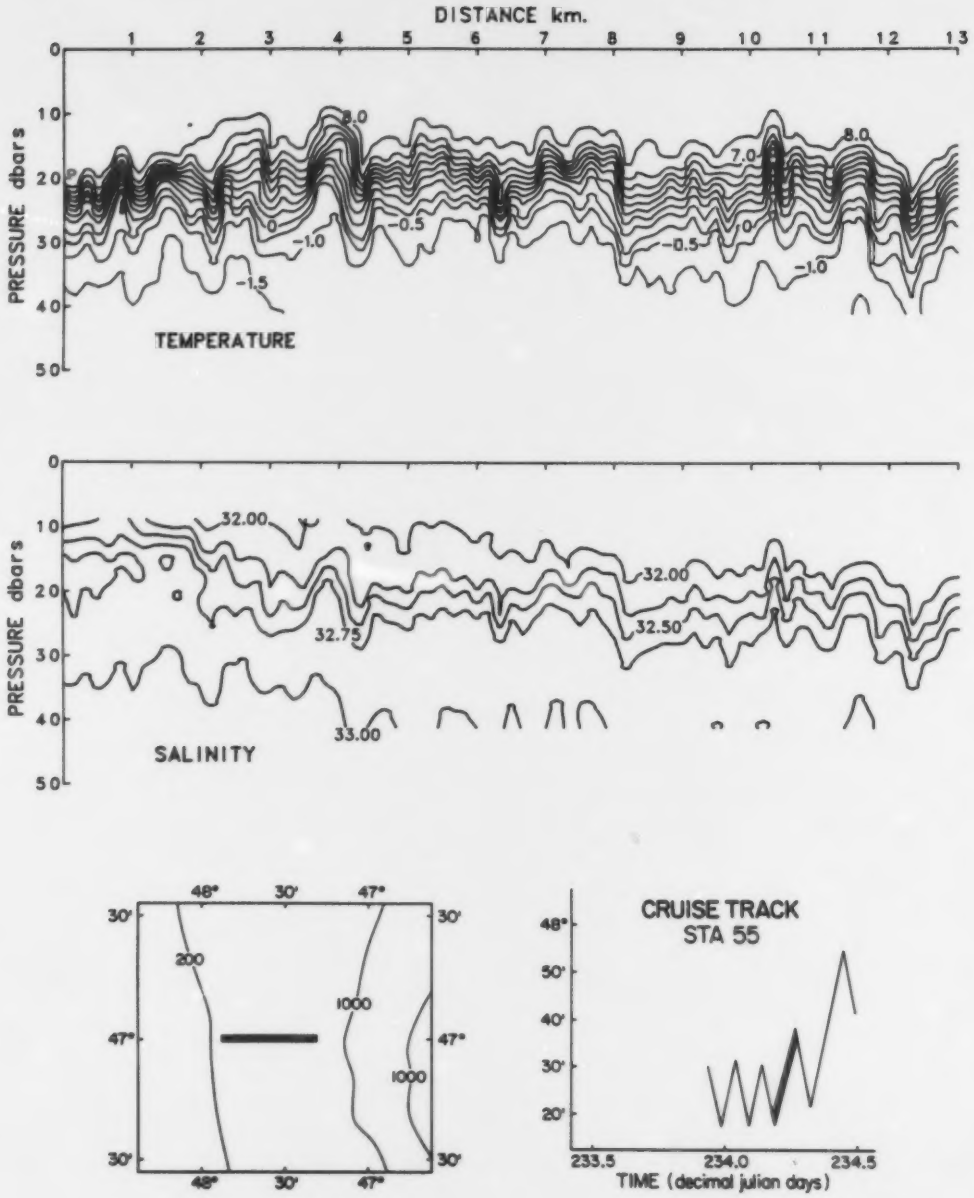

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
8.0
0
-1.0
-0.5
0
-0.5
-1.0
-1.5
TEMPERATURE
32.00
32.00
32.75
32.50
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 55
48°
50'
40'
30'
20'
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 244

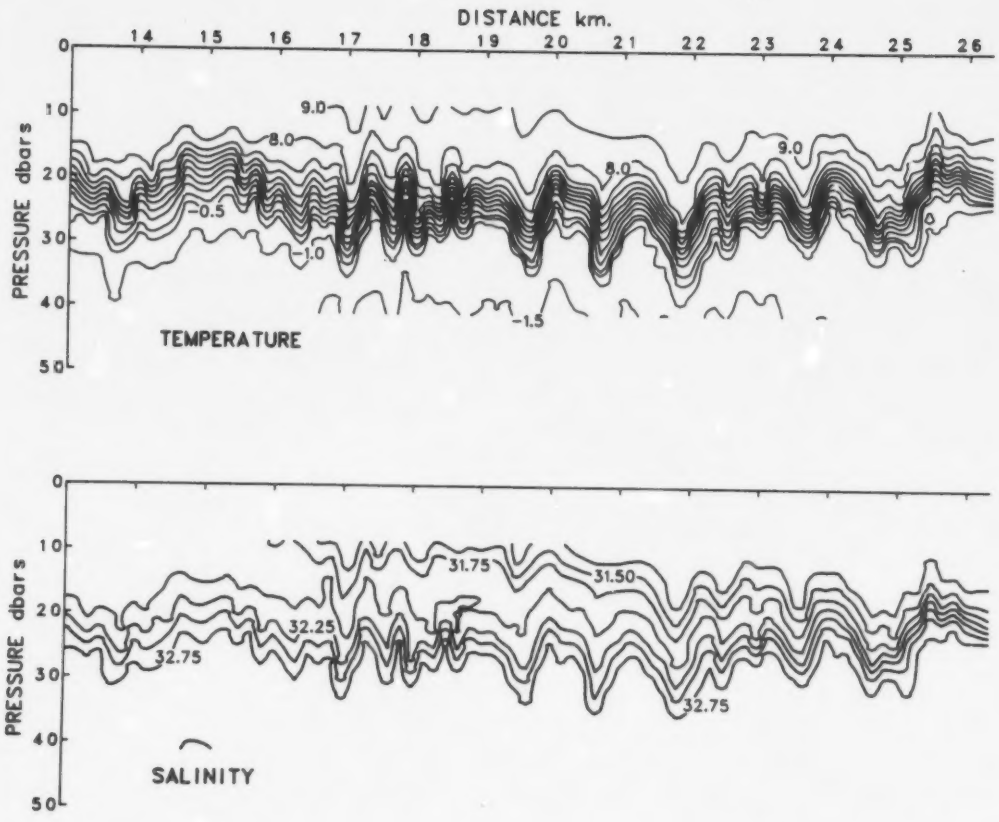

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25 26
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
8.0
9.0
-0.5
-1.0
-1.5
TEMPERATURE
PRESSURE dbars
31.75
31.50
32.25
32.75
32.75
SALINITY

Fig. 245

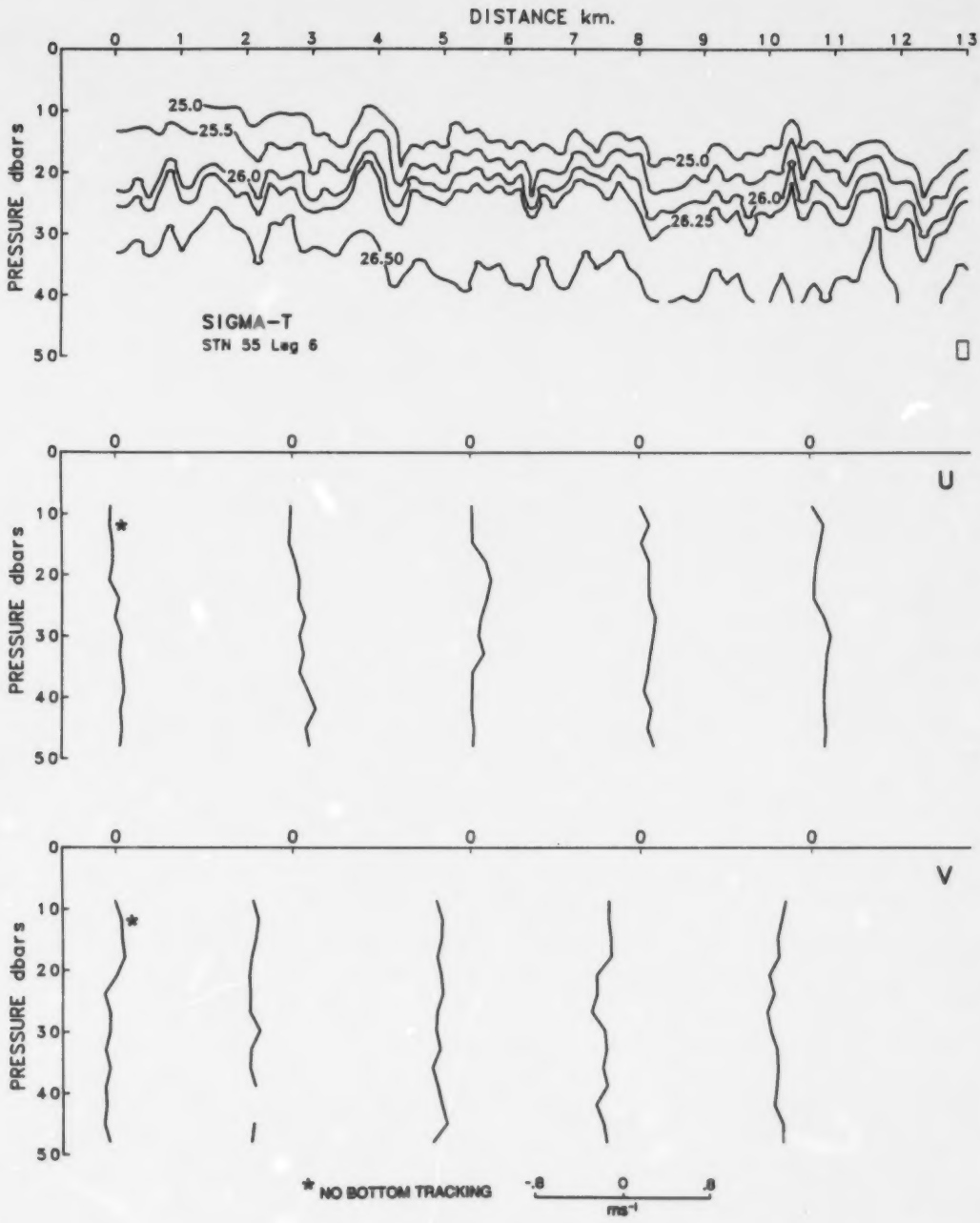

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
25.0
26.0
26.25
26.50
SIGMA-T
STN 55 Leg 6
0 0 0 0 0
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 246

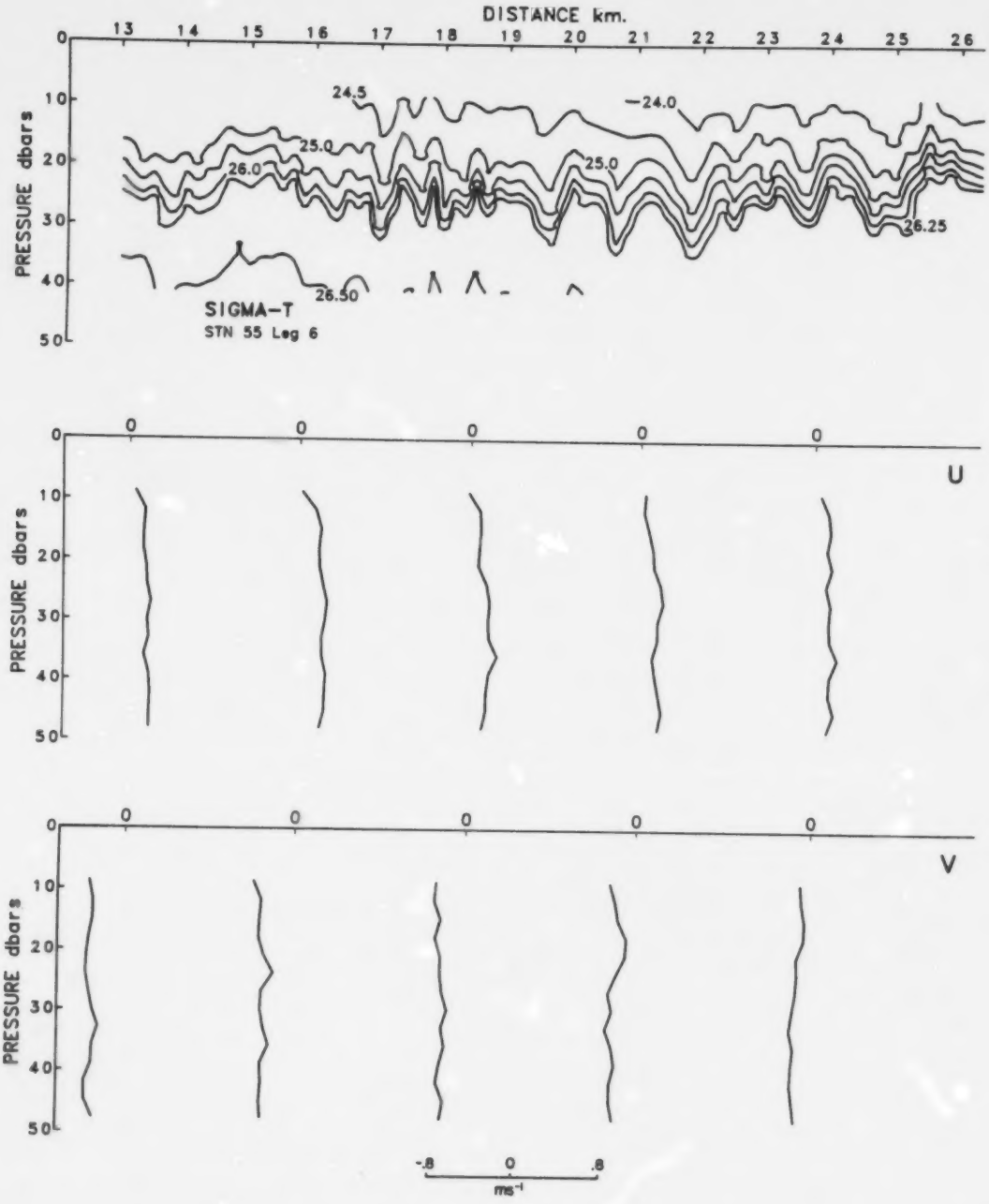

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25 26
PRESSURE dbars
0 10 20 30 40 50
24.5
24.0
25.0
26.0
25.0
26.25
26.50
SIGMA-T
STN 55 Leg 6
0 0 0 0 0
U
PRESSURE dbars
0 10 20 30 40 50
0 0 0 0 0
V
PRESSURE dbars
0 10 20 30 40 50
-.8 0 .8
ms⁻¹

Fig. 247

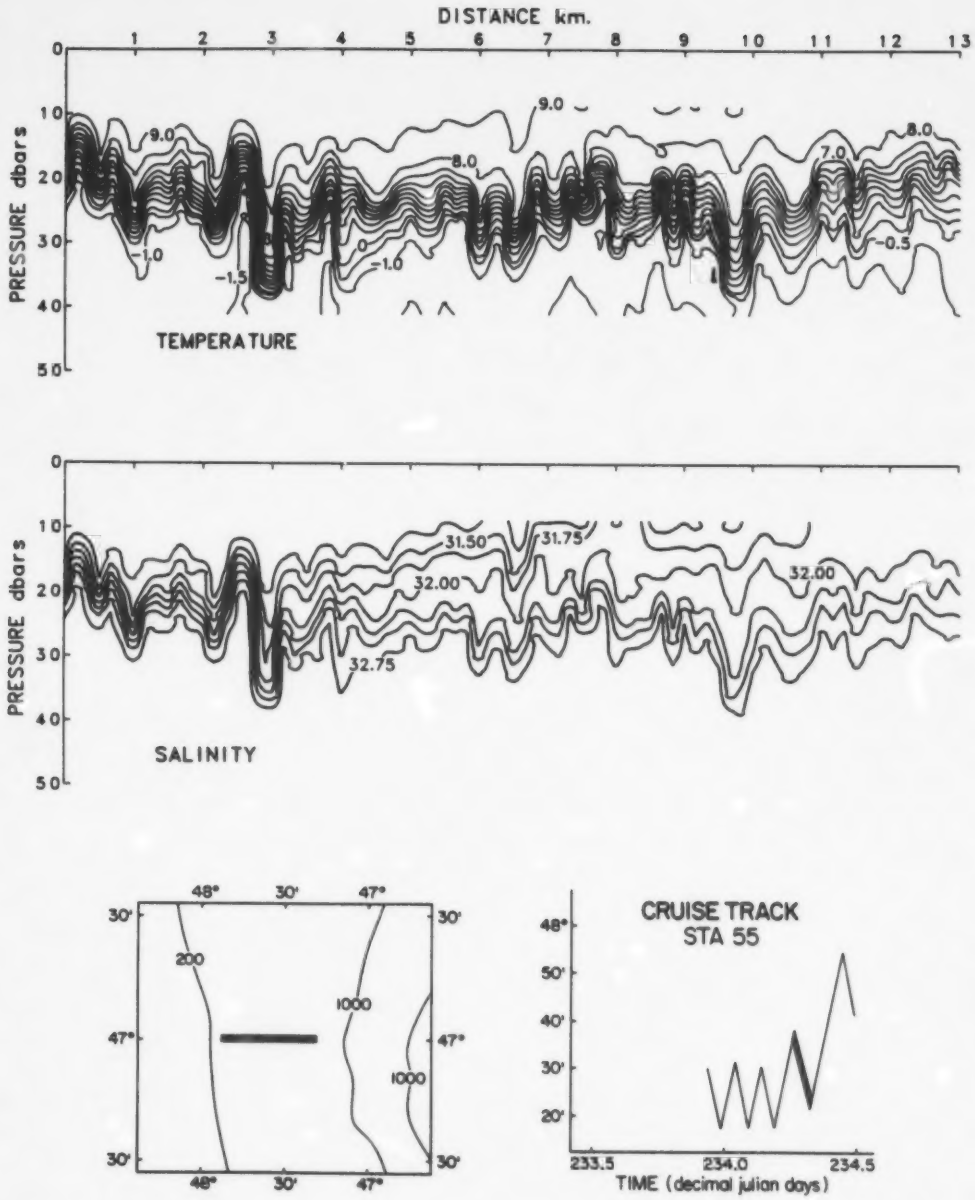

DISTANCE km.
PRESSURE dbars
TEMPERATURE
SALINITY
CRUISE TRACK
STA 55
TIME (decimal julian days)

Fig. 248

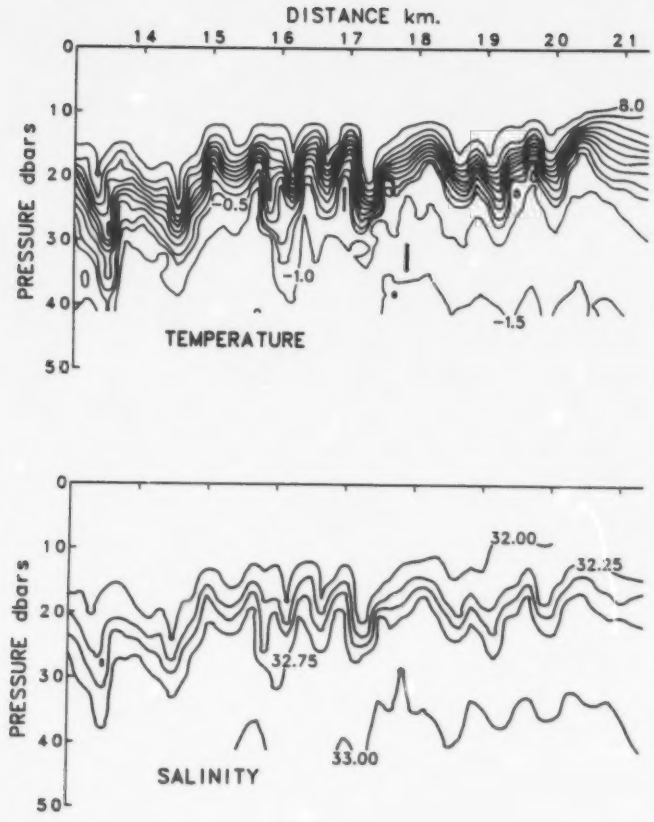

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
8.0
-0.5
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.75
33.00
SALINITY

Fig. 249

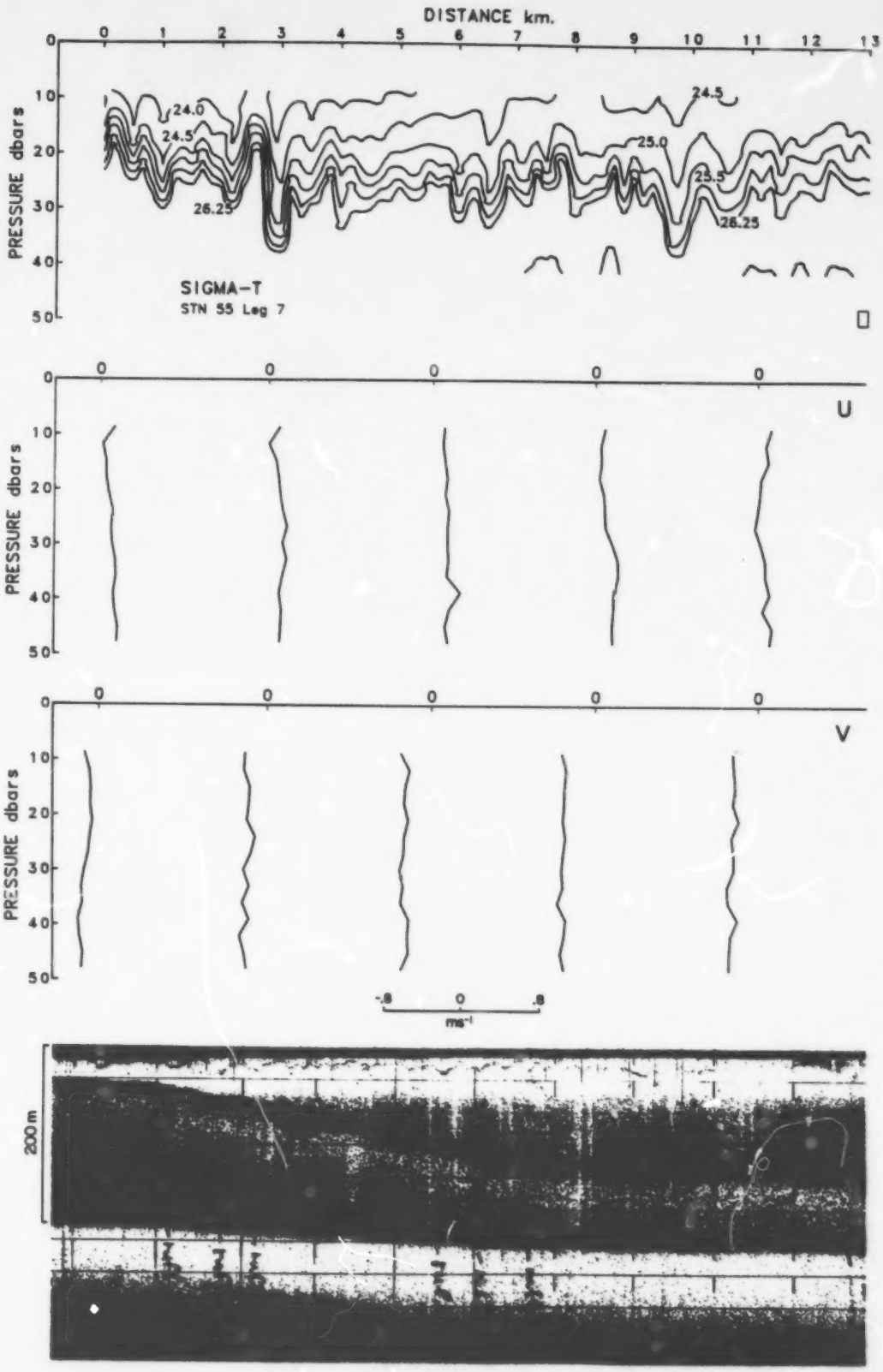

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
26.25
24.5
25.0
25.5
26.25
SIGMA-T
STN 55 Leg 7
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 250

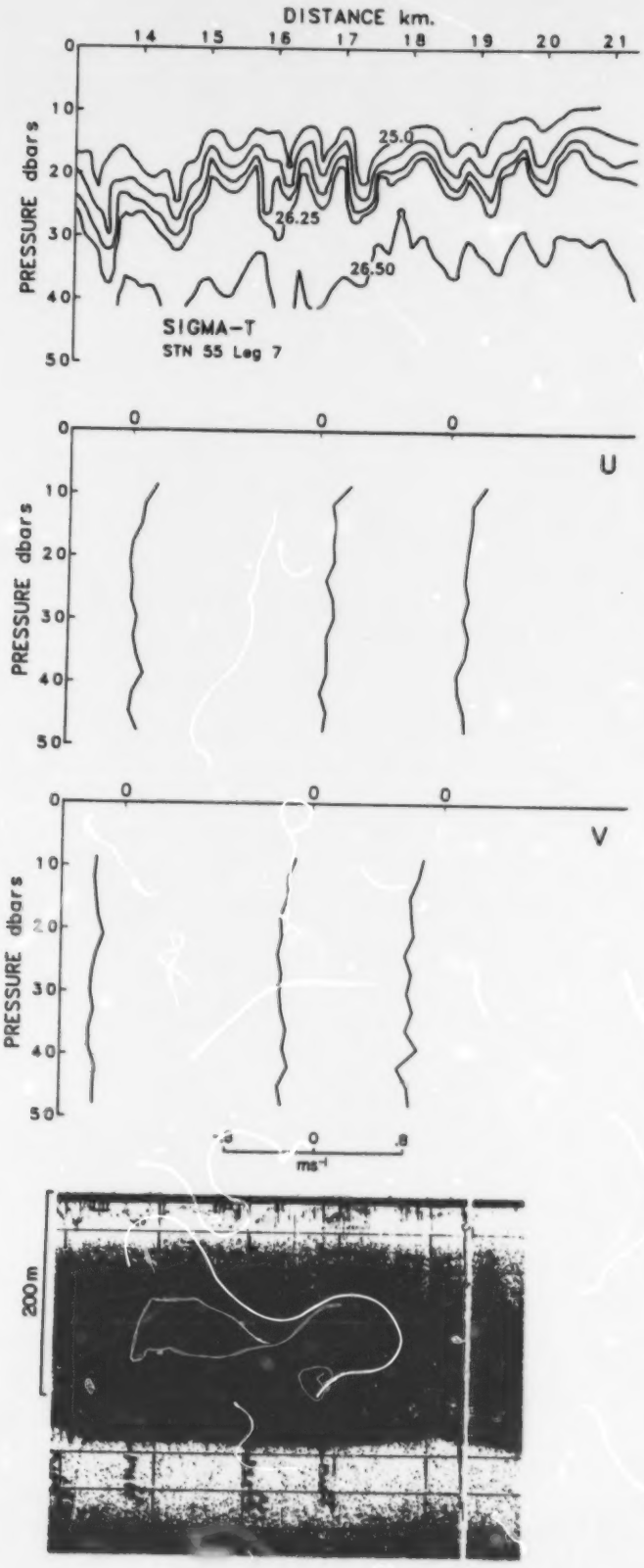
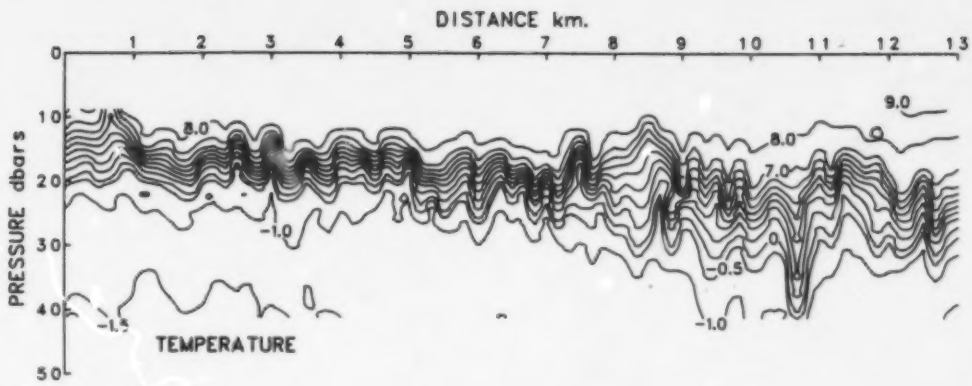
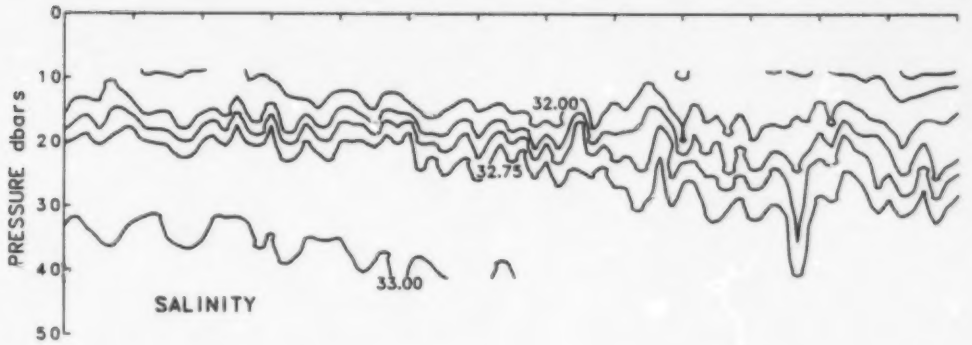
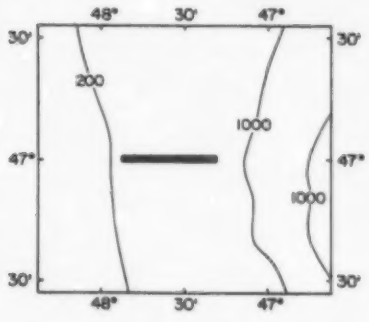

DISTANCE km.
14
15
16
17
18
19
20
21
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 55 Leg 7
U
V
ms⁻¹
200m

Fig. 251


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
8.0
7.0
-1.0
-0.5
-1.0
TEMPERATURE


0
10
20
30
40
50
PRESSURE dbars
32.00
32.75
33.00
SALINITY


48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°

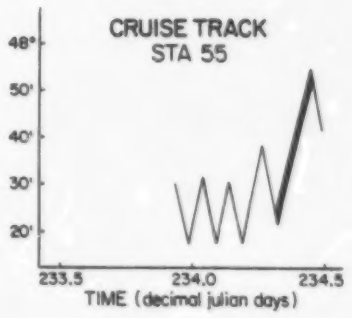

CRUISE TRACK
STA 55
48°
50'
40'
30'
20'
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 252

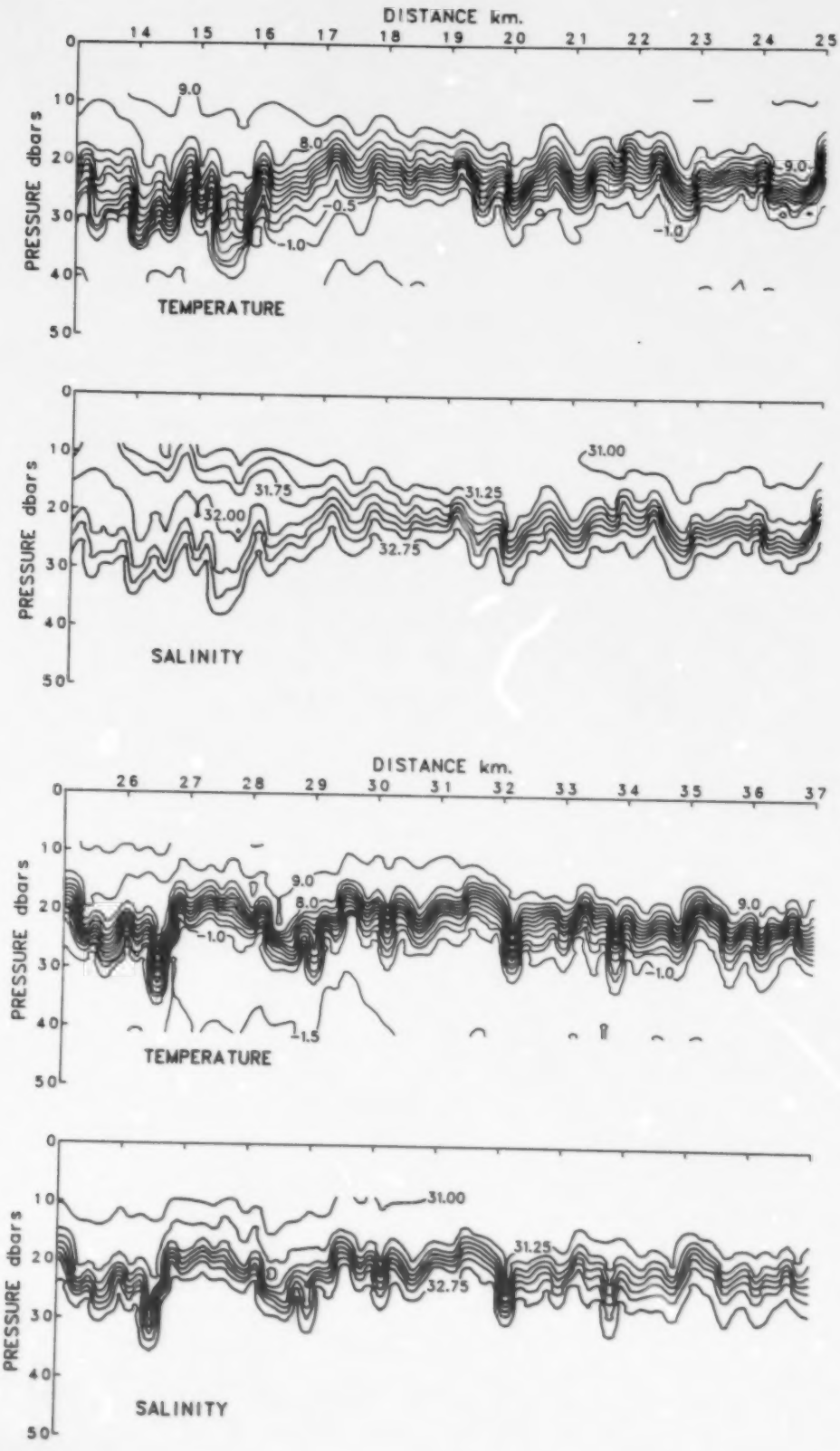

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
9.0
8.0
-0.5
-1.0
-9.0
TEMPERATURE
31.00
31.75
31.25
32.00
32.75
SALINITY
DISTANCE km.
26 27 28 29 30 31 32 33 34 35 36 37
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
32.75
SALINITY

Fig. 253

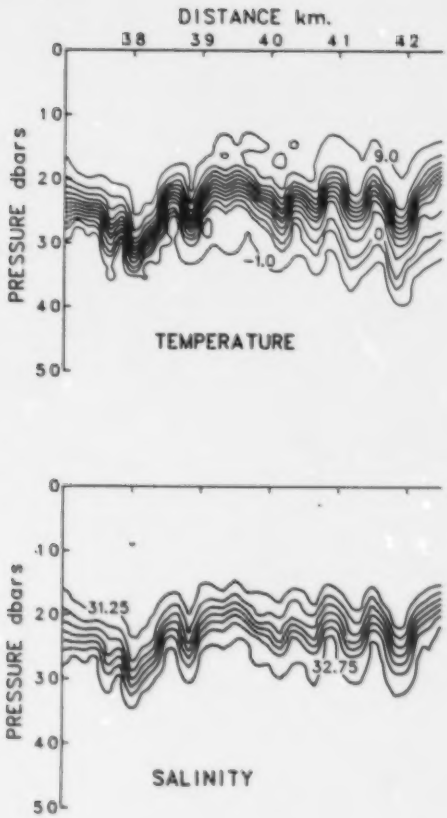

DISTANCE km.
38
39
40
41
42
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
TEMPERATURE
31.25
32.75
SALINITY

Fig. 254

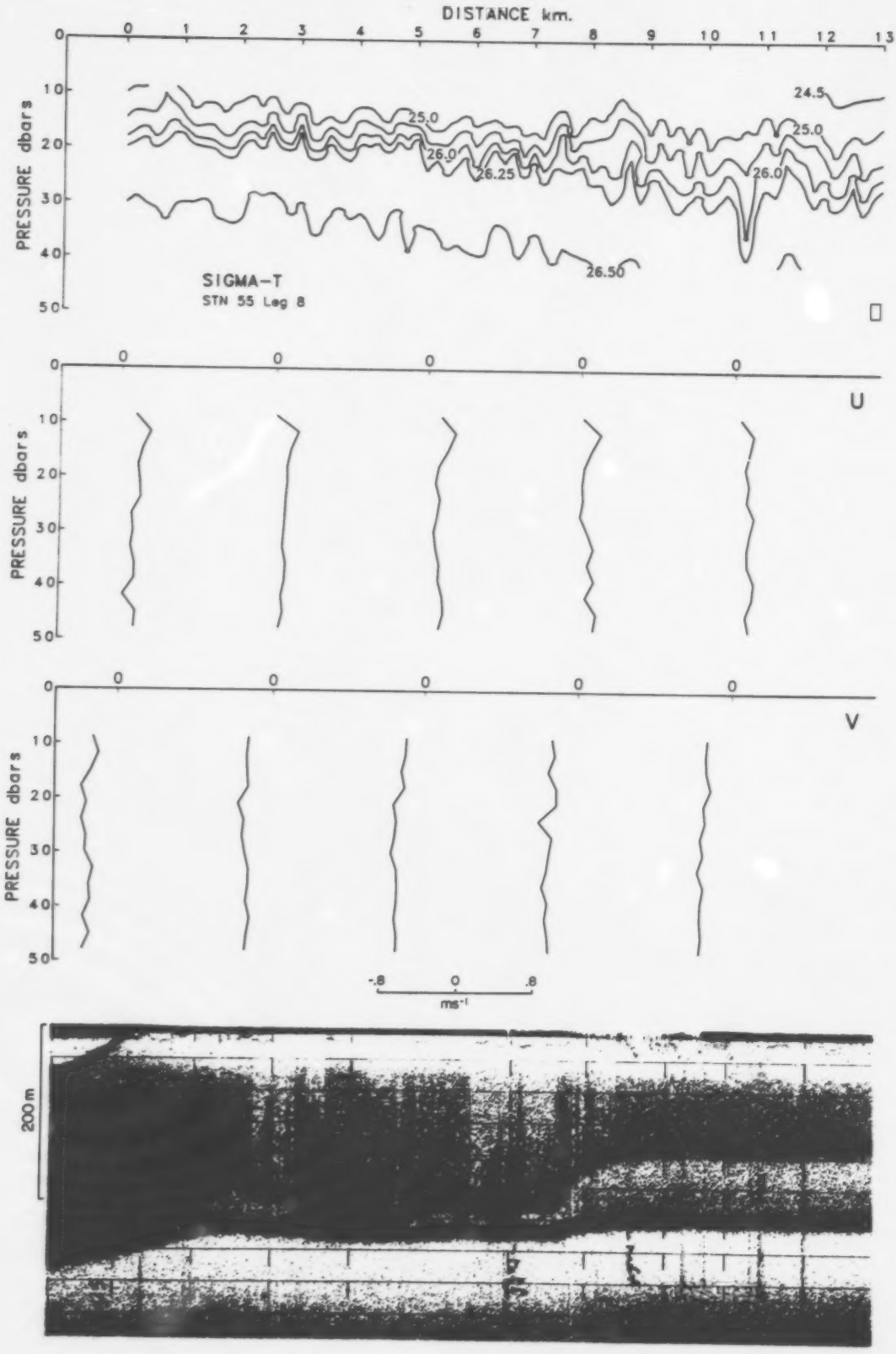

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.0
26.0
26.25
25.0
26.0
26.50
SIGMA-T
STN 55 Leg 8
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 255

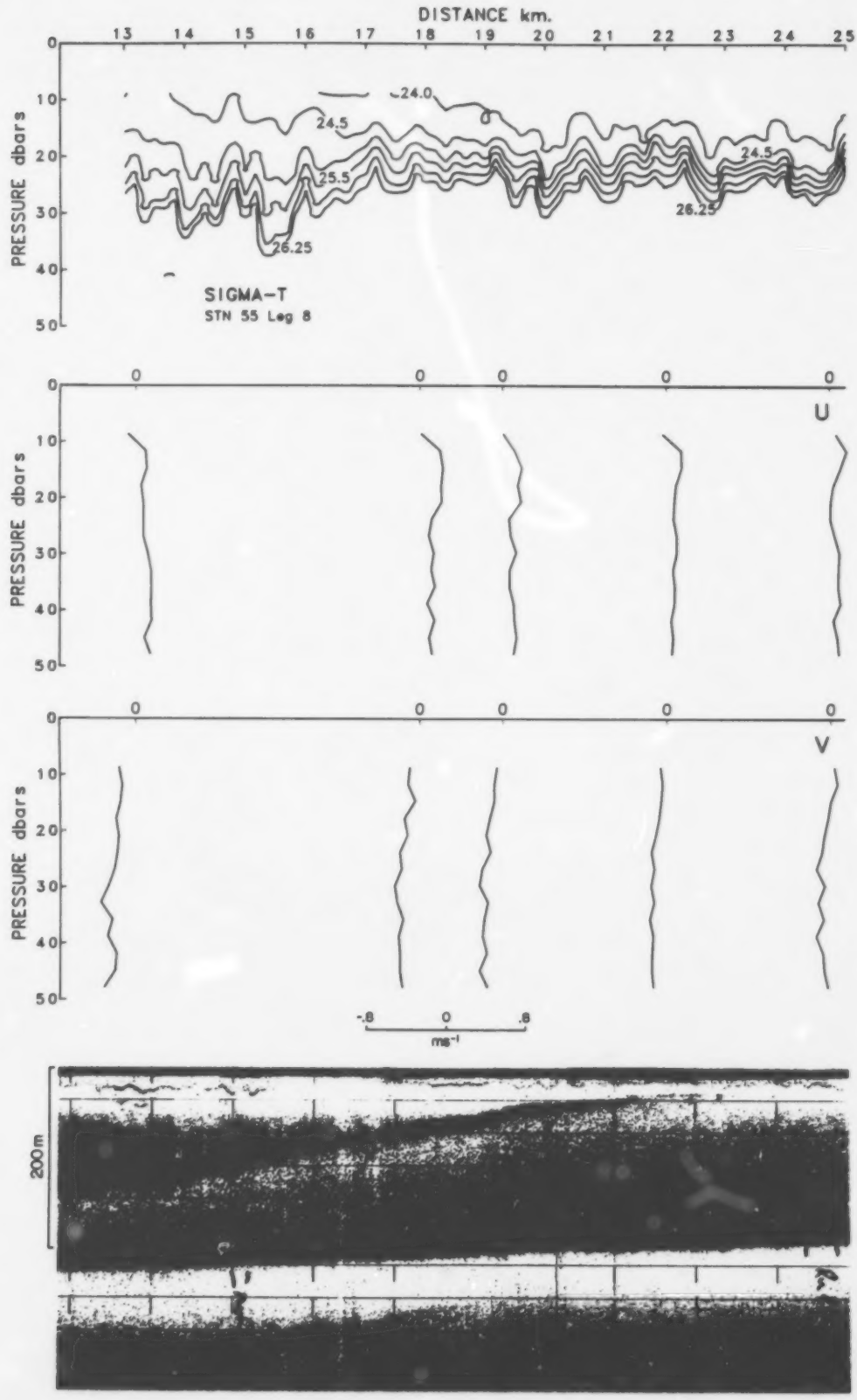

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
25.5
26.25
24.5
26.25
SIGMA-T
STN 55 Leg 8
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 256

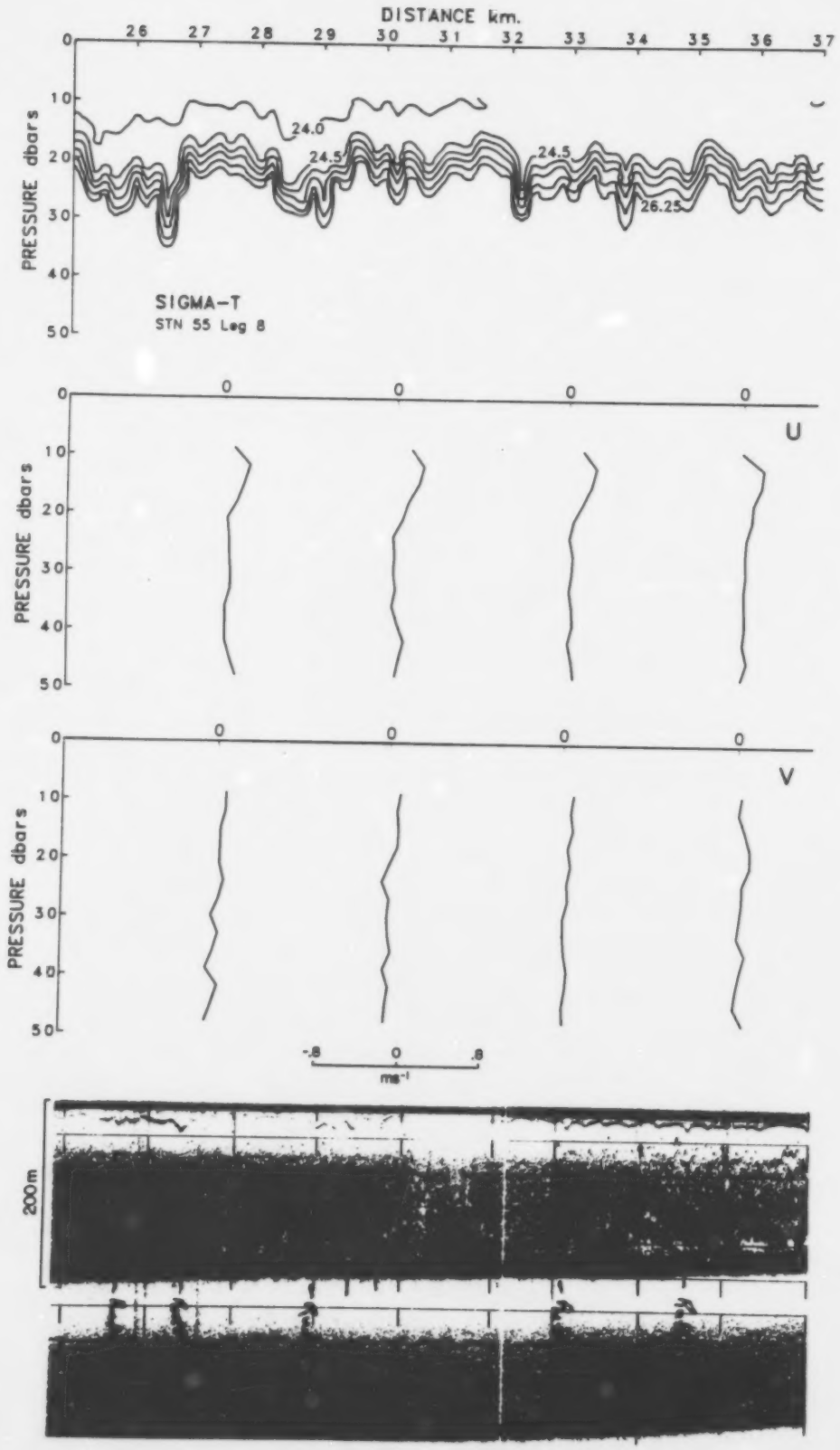

DISTANCE km.
26 27 28 29 30 31 32 33 34 35 36 37
PRESSURE dbars
24.0
24.5
24.5
26.25
SIGMA-T
STN 55 Leg 8
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 257

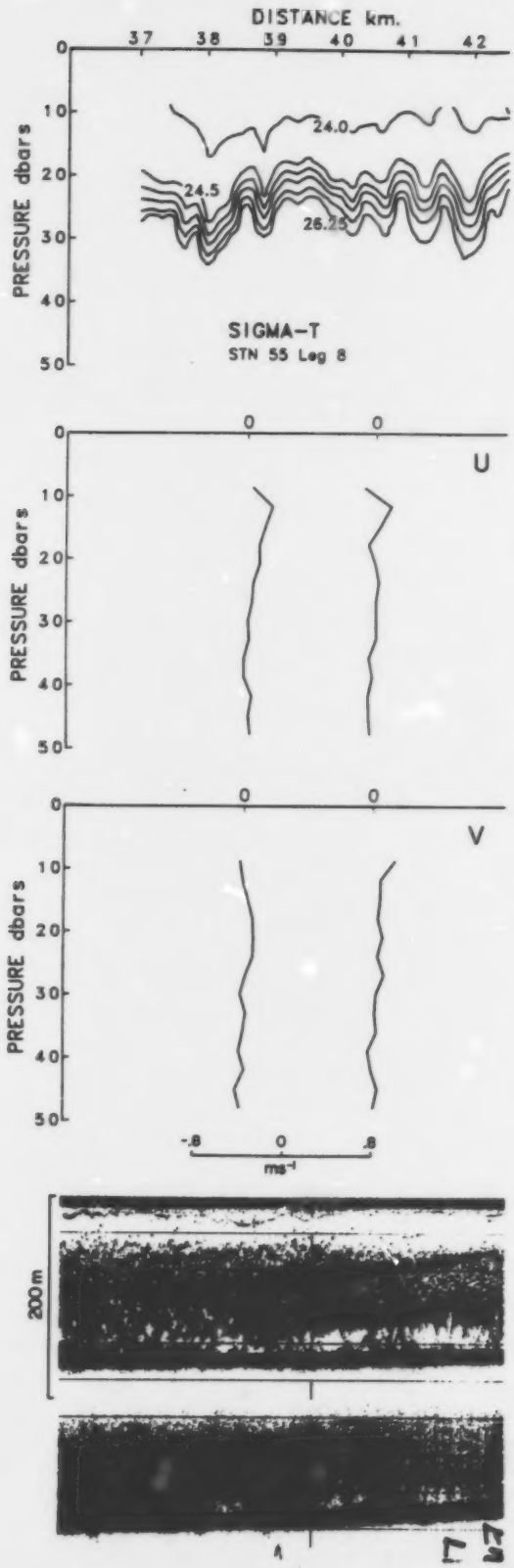

DISTANCE km.
37
38
39
40
41
42
0
10
20
30
40
50
PRESSURE dbars
24.0
24.5
26.25
SIGMA-T
STN 55 Leg 8
0
0
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 258

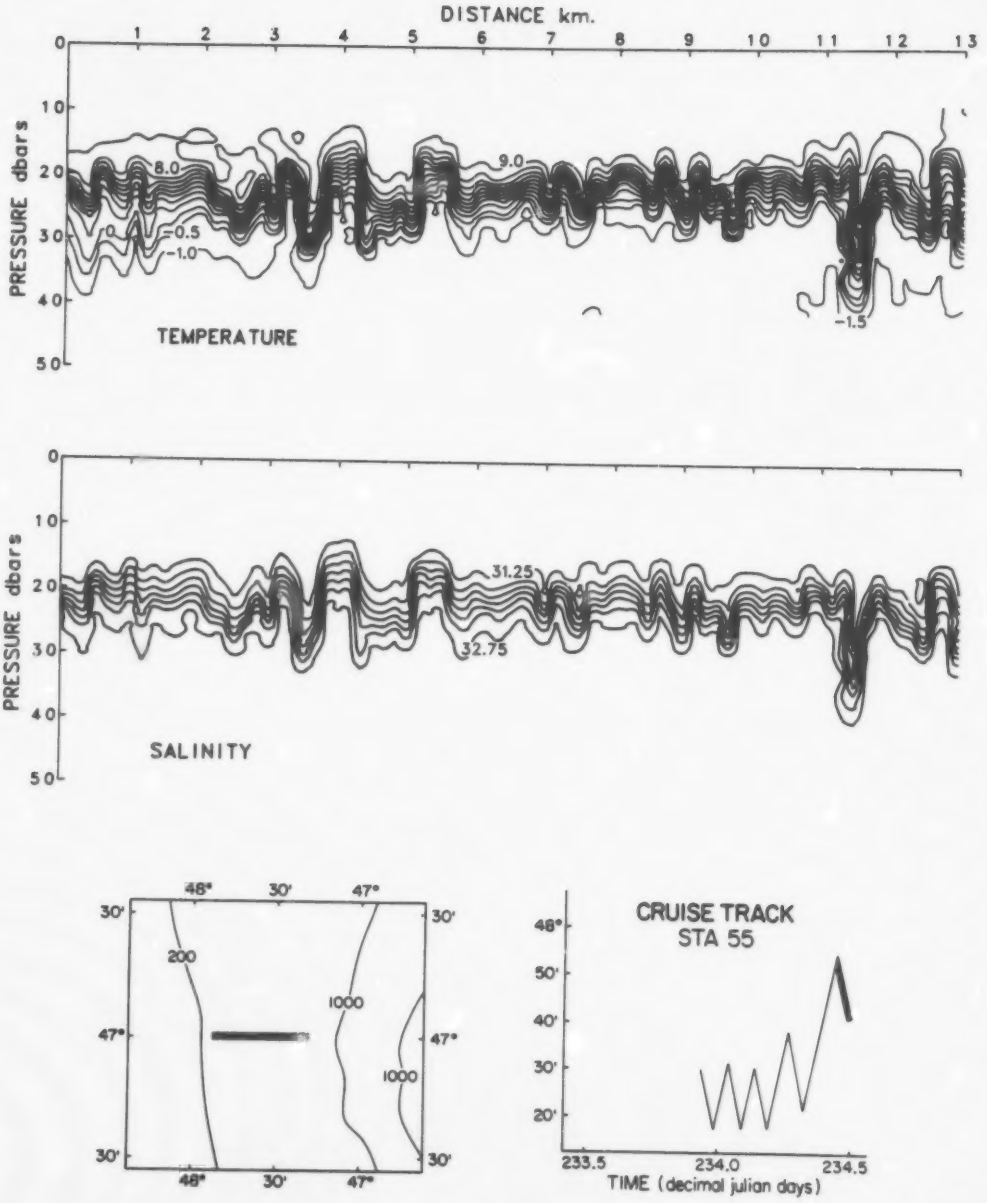

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
8.0
9.0
0
-0.5
-1.0
-1.5
TEMPERATURE
PRESSURE dbars
31.25
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 55
233.5
234.0
234.5
TIME (decimal julian days)

Fig. 259

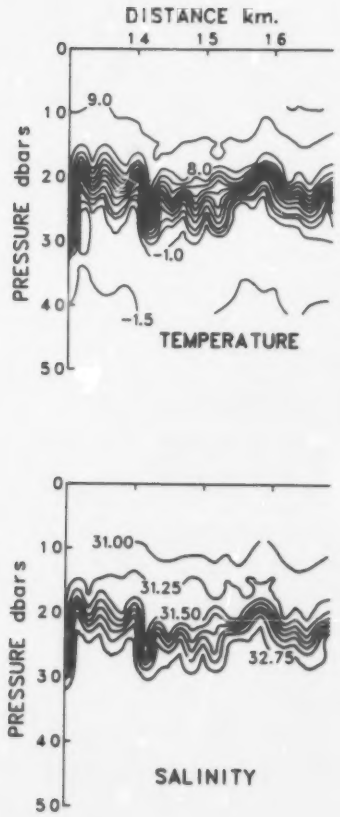

DISTANCE km.
14
15
16
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
31.50
32.75
SALINITY

Fig. 260

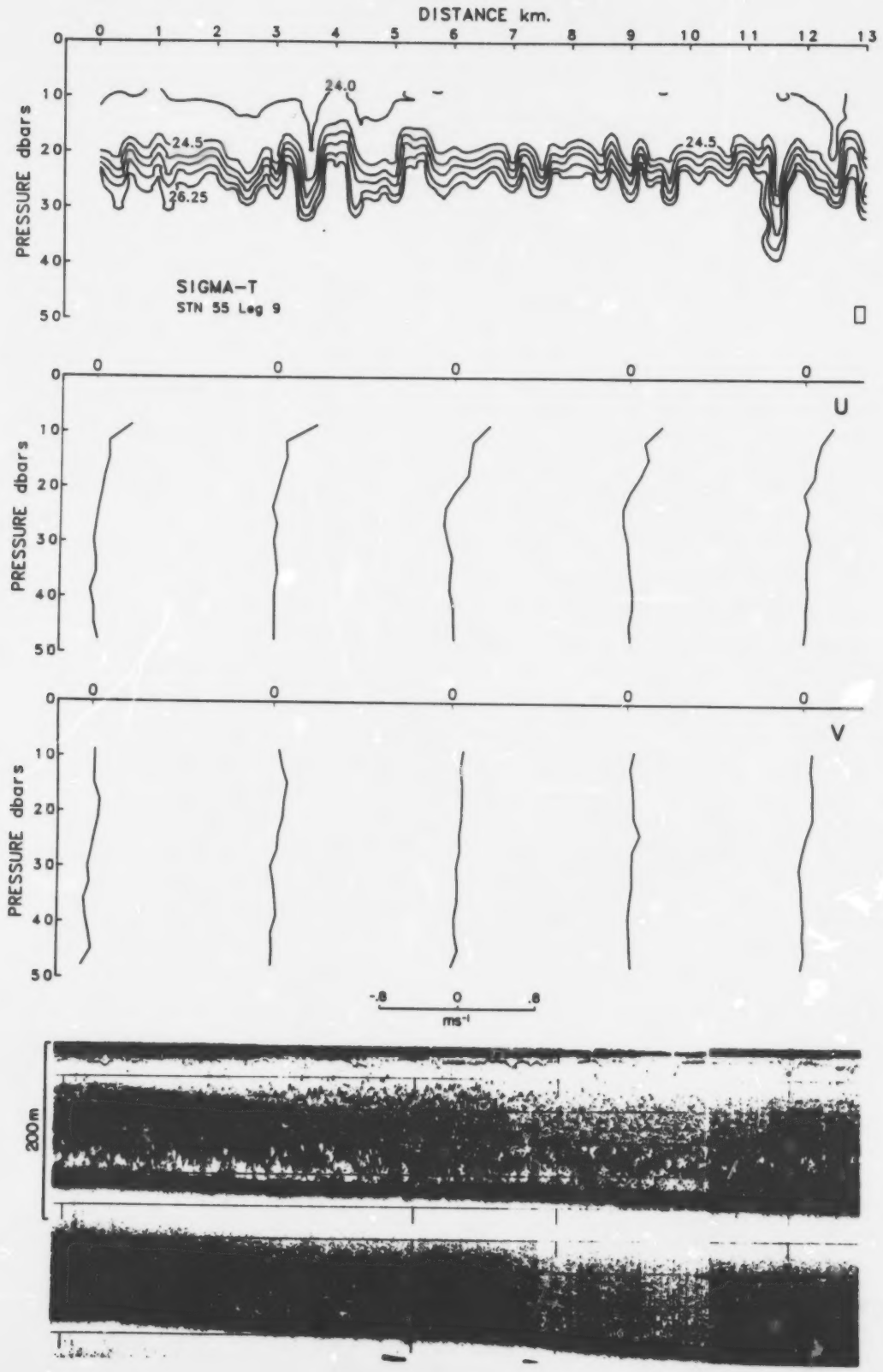

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
26.25
24.5
SIGMA-T
STN 55 Leg 9
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 261

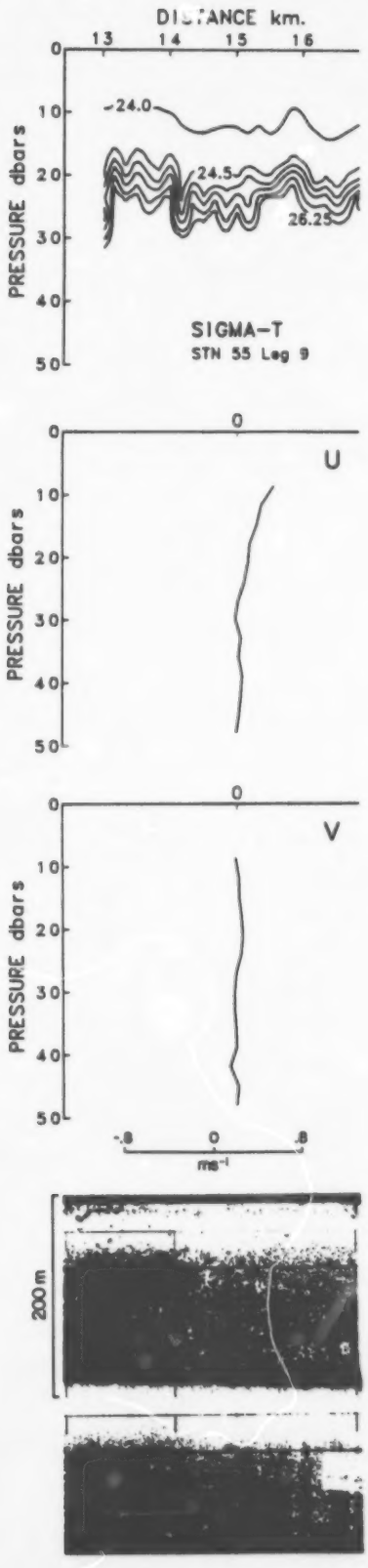
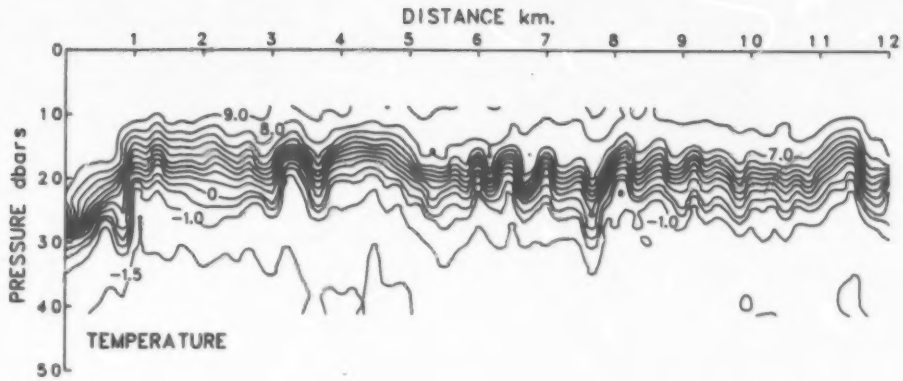
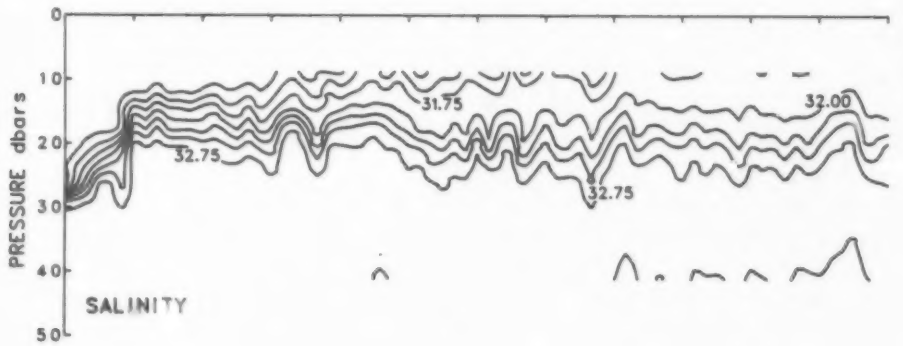

DISTANCE km.
13
14
15
16
0
10
20
30
40
50
PRESSURE dbars
24.0
24.5
26.25
SIGMA-T
STN 55 Leg 9
0
U
V
-.8
0
.8
ms⁻¹
200 m

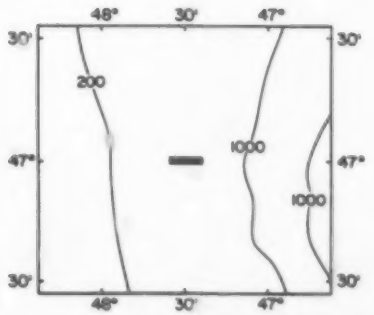
Fig. 262

Figures 263-264

BATFISH station 56; 1 section of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
7.0
0
-1.0
-1.5
-1.0
TEMPERATURE


0
10
20
30
40
50
PRESSURE dbars
31.75
32.00
32.75
32.75
SALINITY


48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°

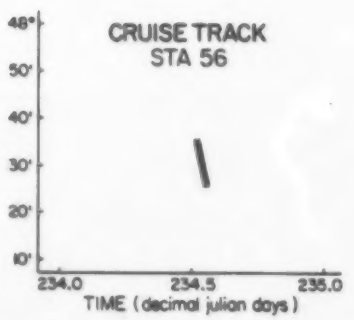

CRUISE TRACK
STA 56
48°
50'
40'
30'
20'
10'
234.0
234.5
235.0
TIME (decimal julian days)

Fig. 263

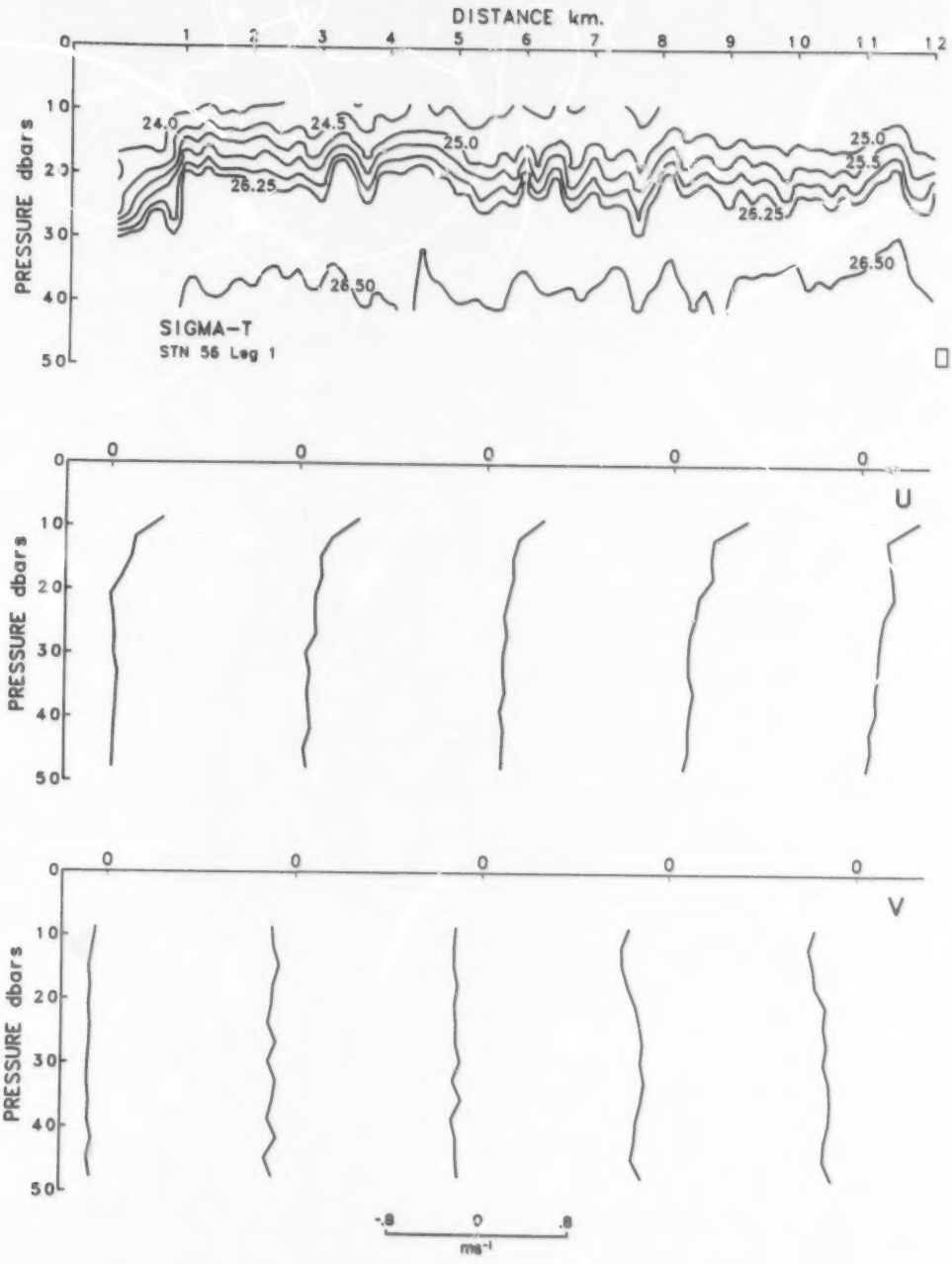

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12
PRESSURE dbars
10 20 30 40 50
24.0
24.5
25.0
25.0
25.5
26.25
26.25
26.50
26.50
SIGMA-T
STN 56 Leg 1
0 0 0 0 0
U
0 0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 264

Figures 265-292

BATFISH station 57; 7 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

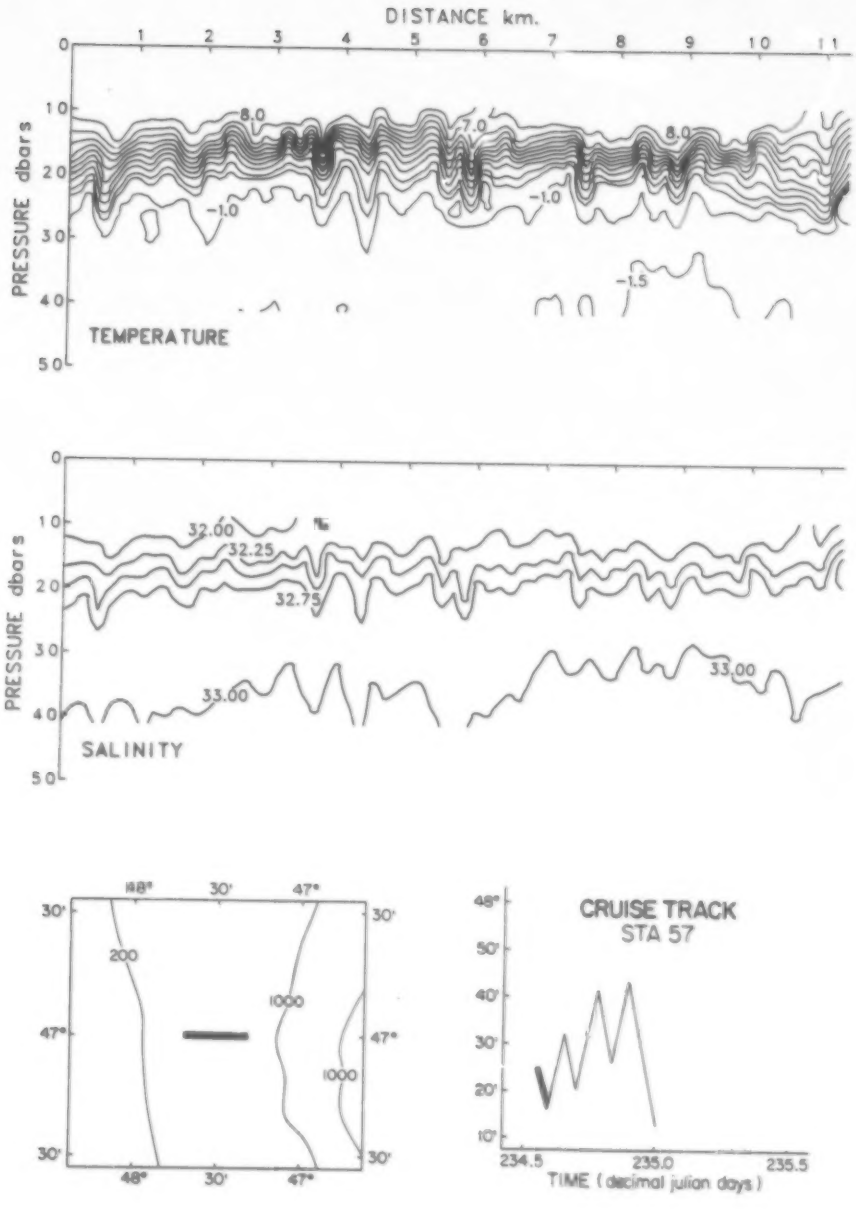

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11
PRESSURE dbars
10
20
30
40
50
8.0
7.0
8.0
-1.0
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
32.00
32.25
32.75
33.00
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 57
48°
50'
40'
30'
20'
10'
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 265

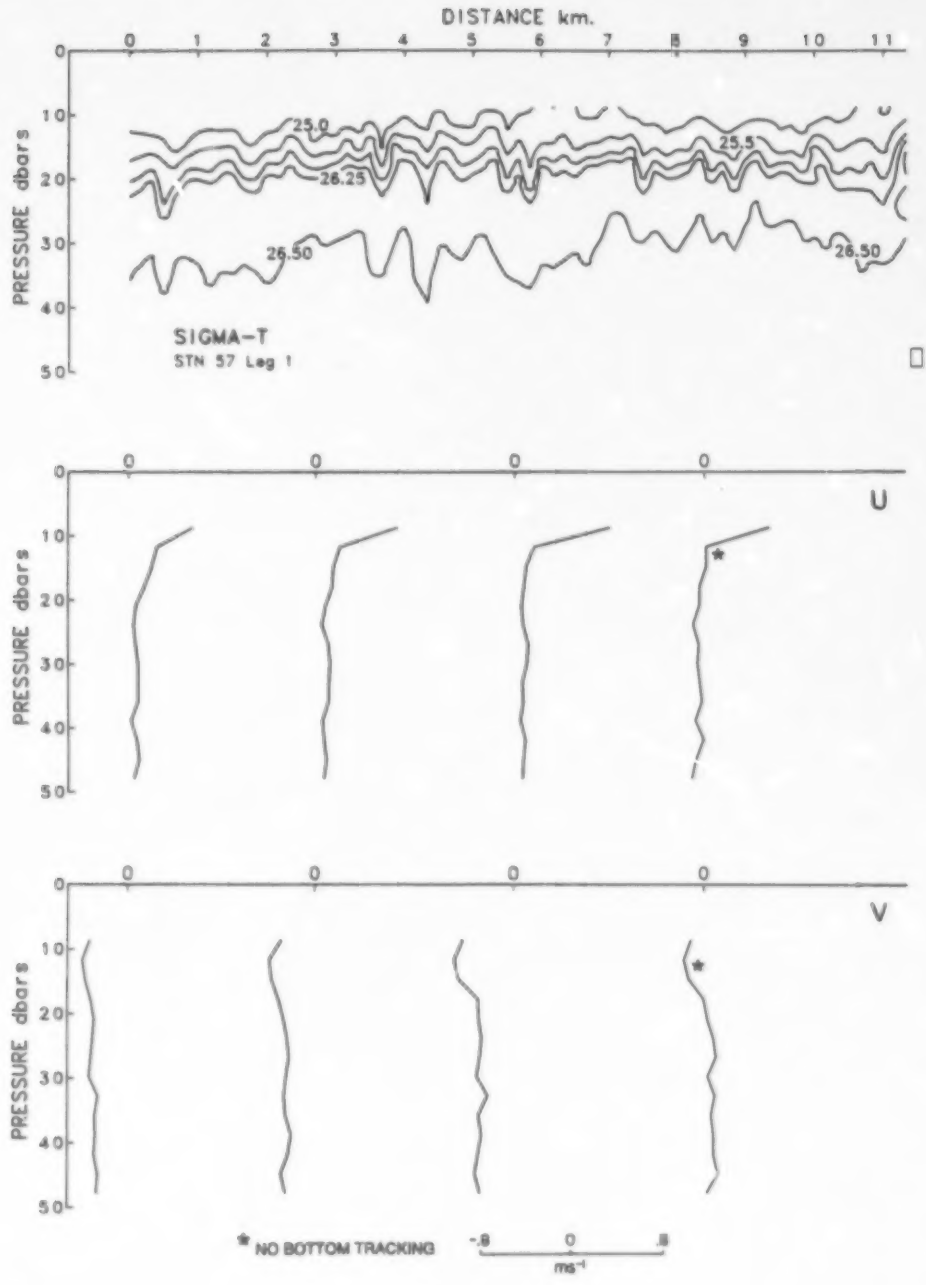

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.25
26.50
26.50
SIGMA-T
STN 57 Leg 1
U
V
0 0 0 0
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 266

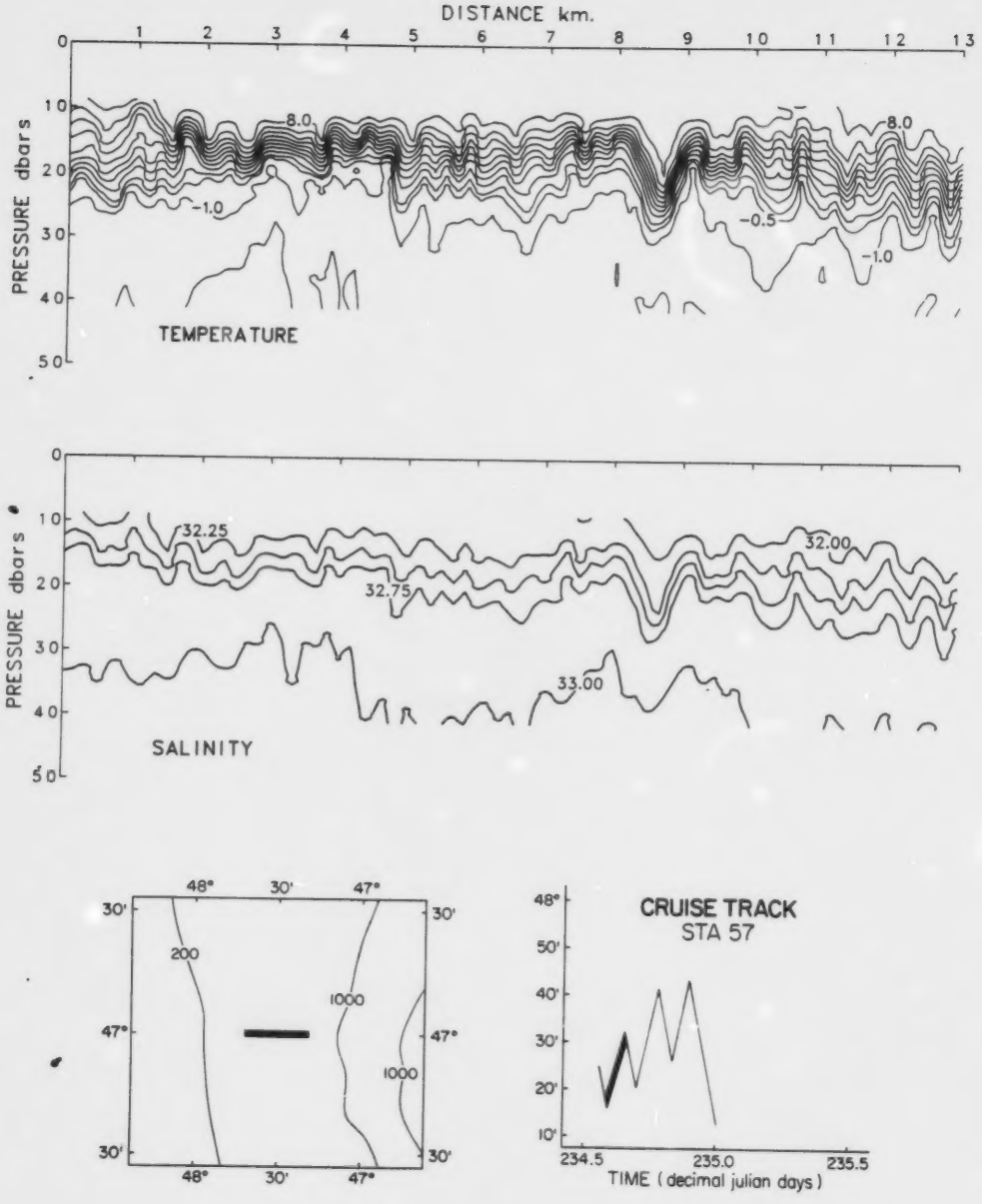

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
8.0
-1.0
-0.5
TEMPERATURE
32.25
32.75
33.00
32.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 57
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 267

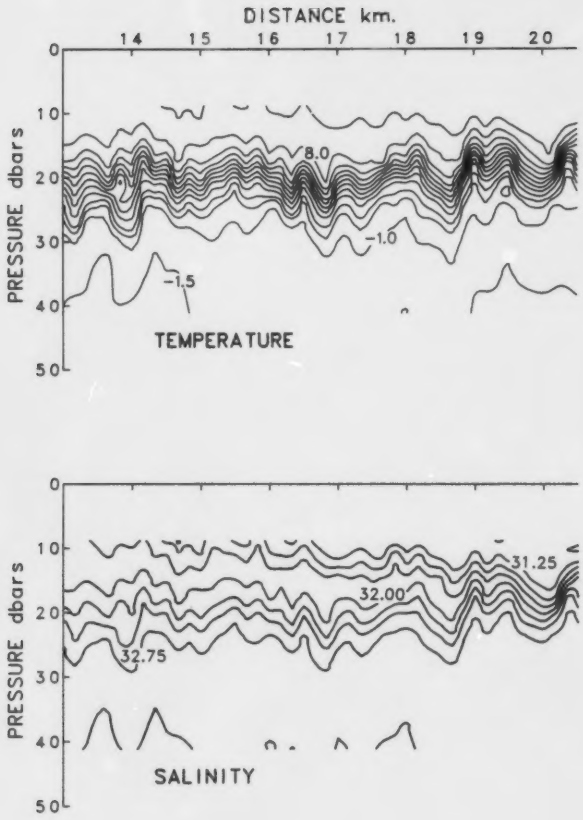

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
31.25
32.00
32.75
SALINITY

Fig. 268

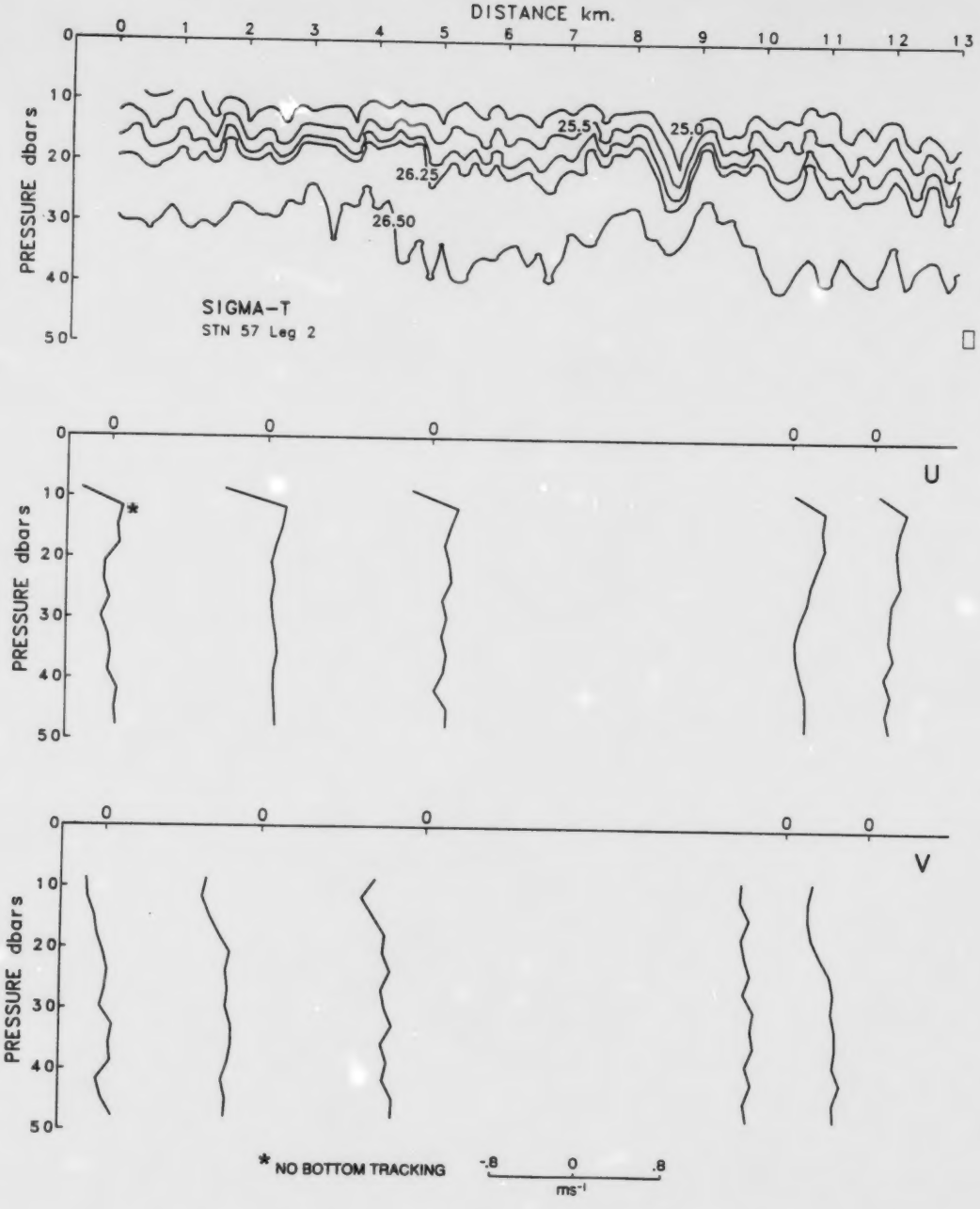

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.5
25.0
26.25
26.50
SIGMA-T
STN 57 Leg 2
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms-1

Fig. 269

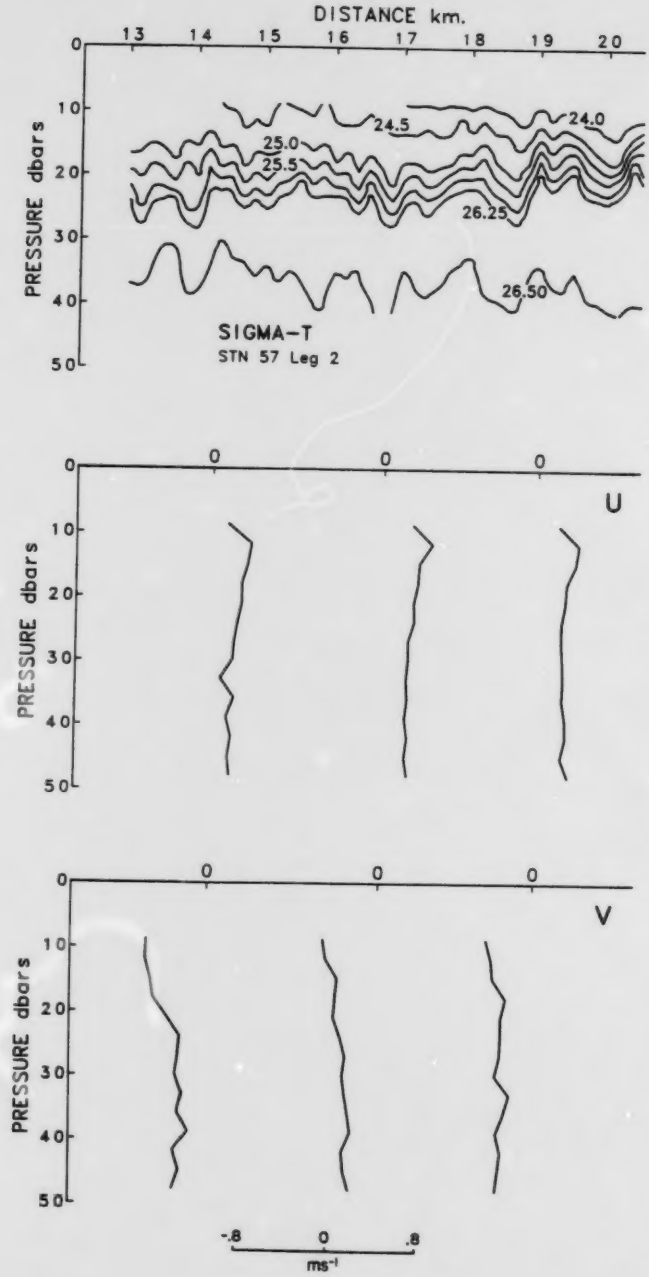

DISTANCE km.
13 14 15 16 17 18 19 20
0
10
20
30
40
50
PRESSURE dbars
24.5
24.0
25.0
25.5
26.25
26.50
SIGMA-T
STN 57 Leg 2
0 0 0
U
0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 270

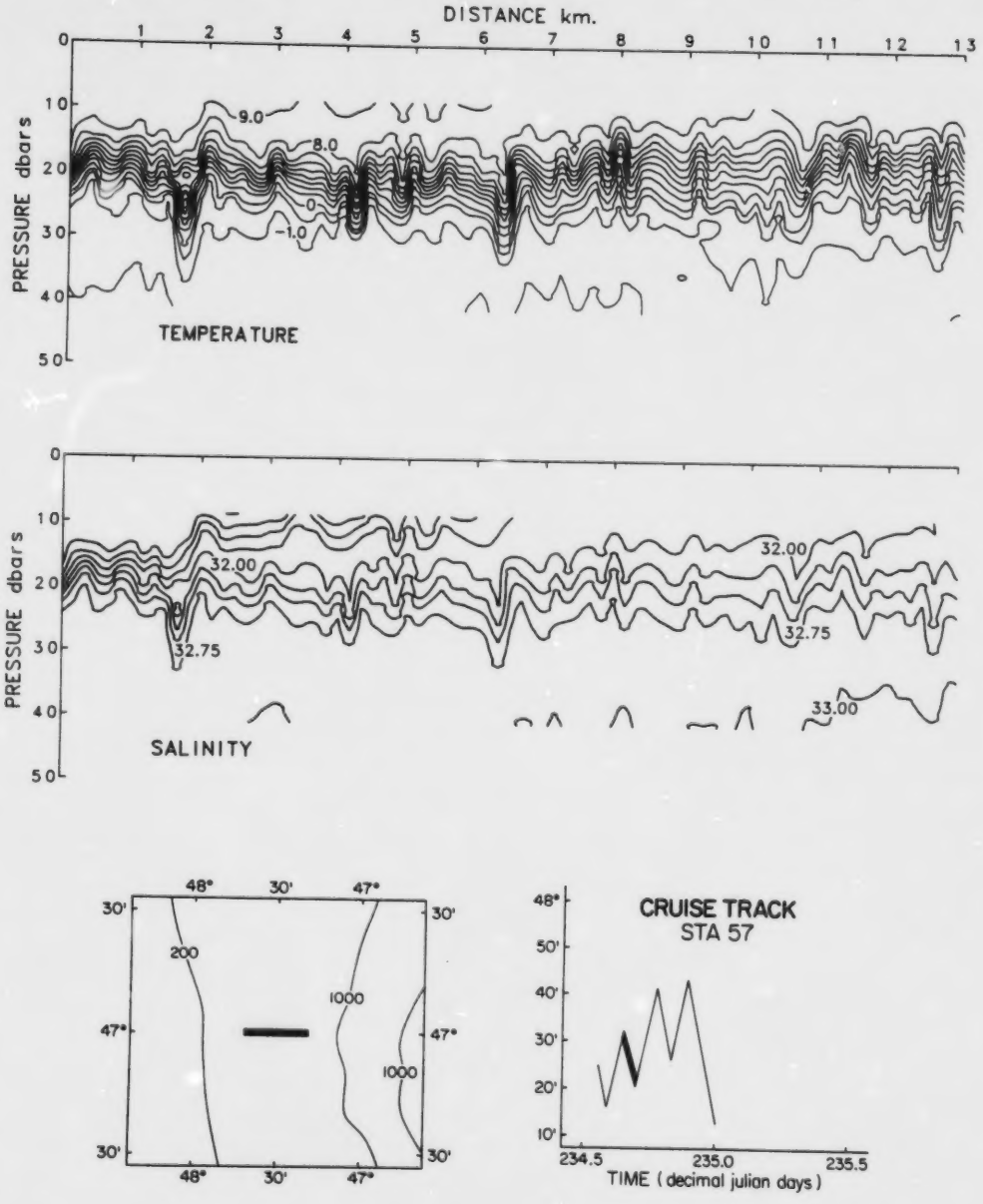

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
0
-1.0
TEMPERATURE
PRESSURE dbars
32.00
32.75
32.00
32.75
33.00
SALINITY
48°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°
CRUISE TRACK
STA 57
48°
50'
40'
30'
20'
10'
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 271

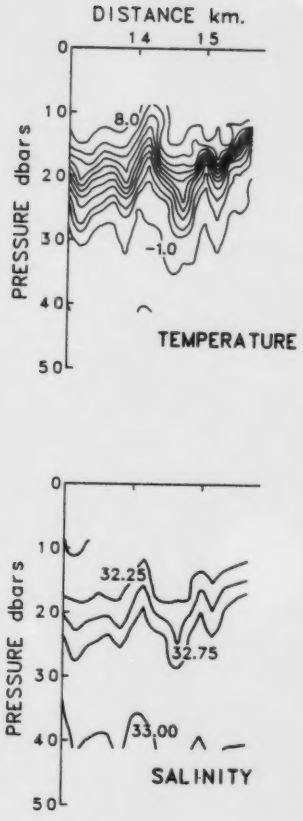

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.25
32.75
33.00
SALINITY

Fig. 272

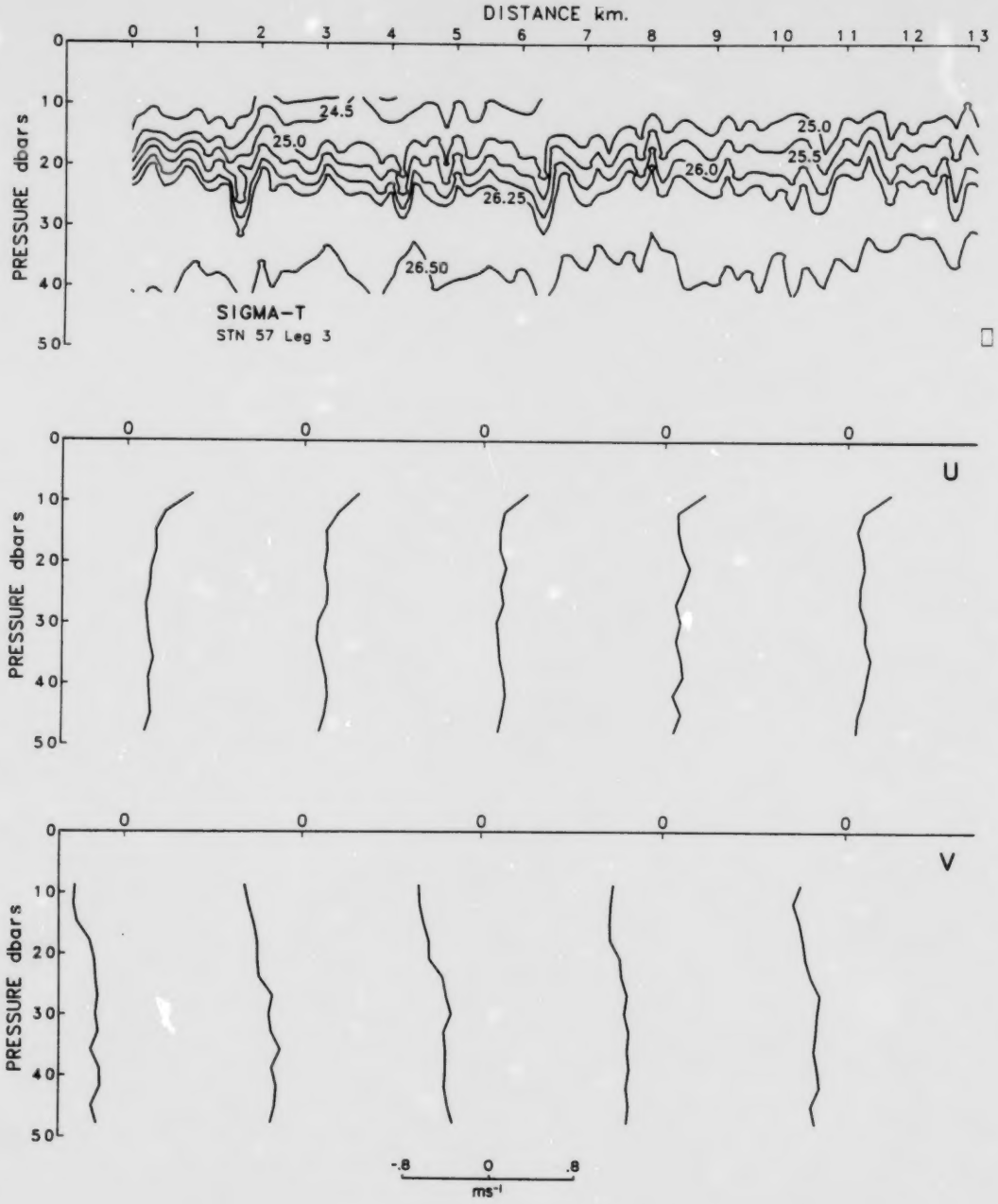

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.0
26.0
25.5
26.25
26.50
SIGMA-T
STN 57 Leg 3
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 273

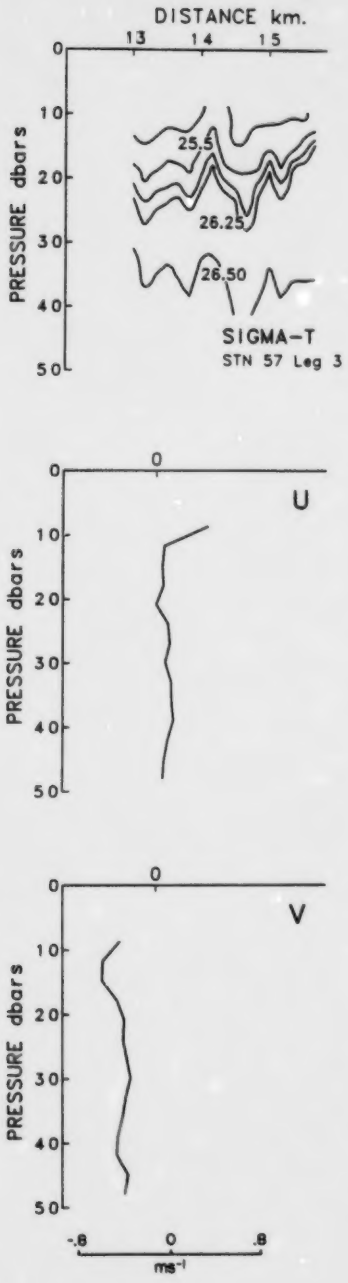

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
25.5
26.25
26.50
SIGMA-T
STN 57 Leg 3
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 274

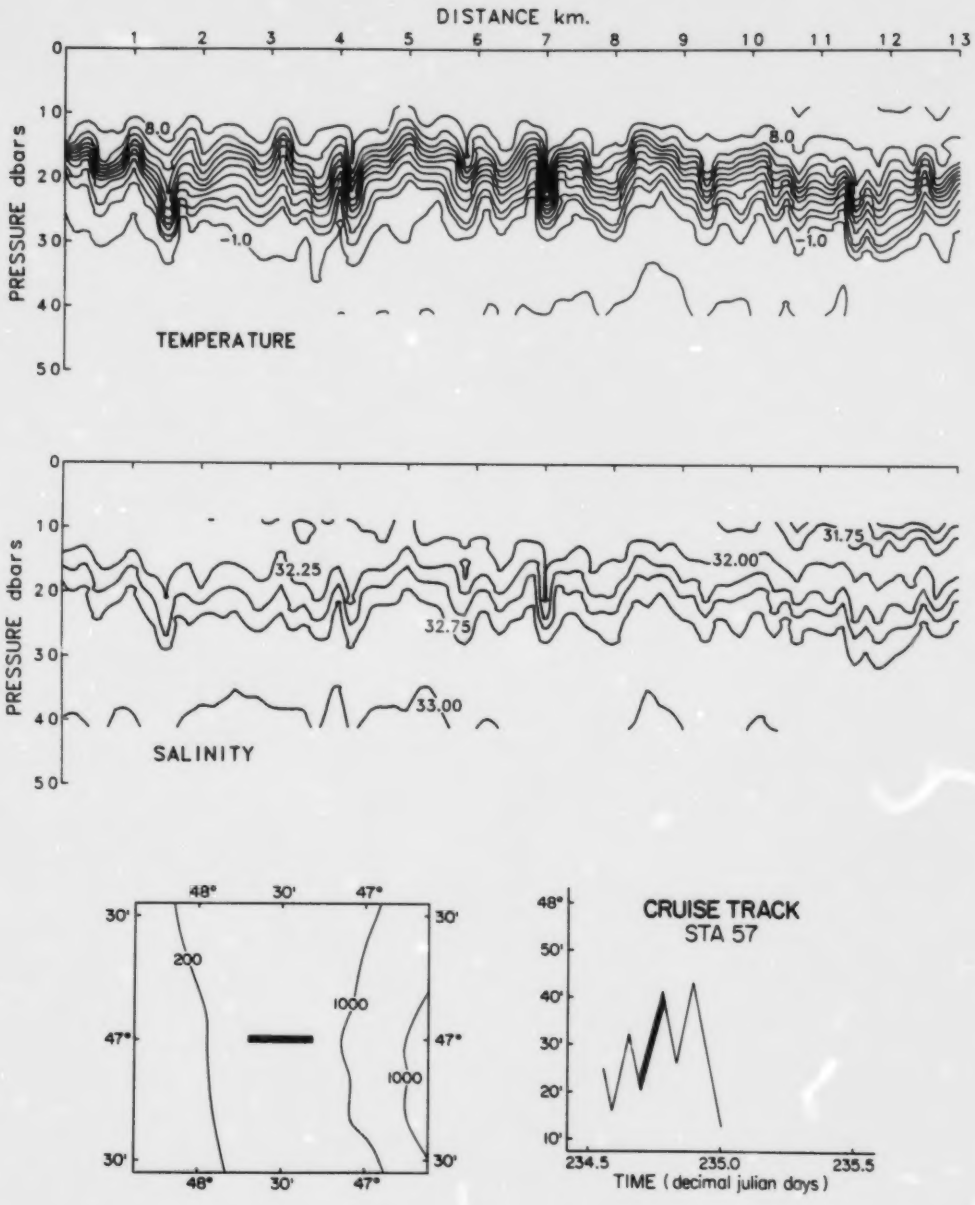

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
8.0
-1.0
TEMPERATURE
32.25
32.75
32.00
31.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 57
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 275

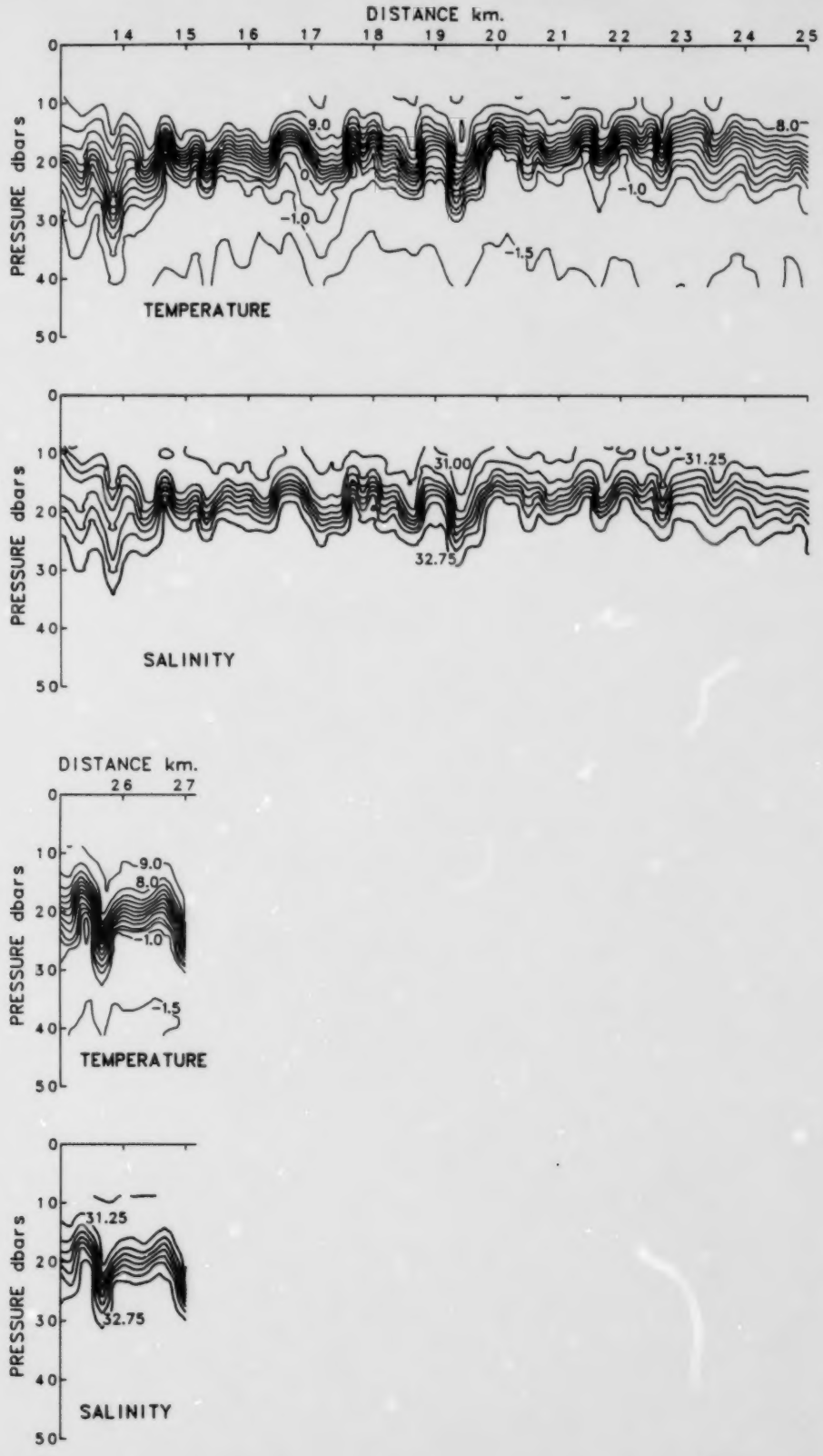

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.00
31.25
32.75
SALINITY
DISTANCE km.
26 27
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.25
32.75
SALINITY

Fig. 276

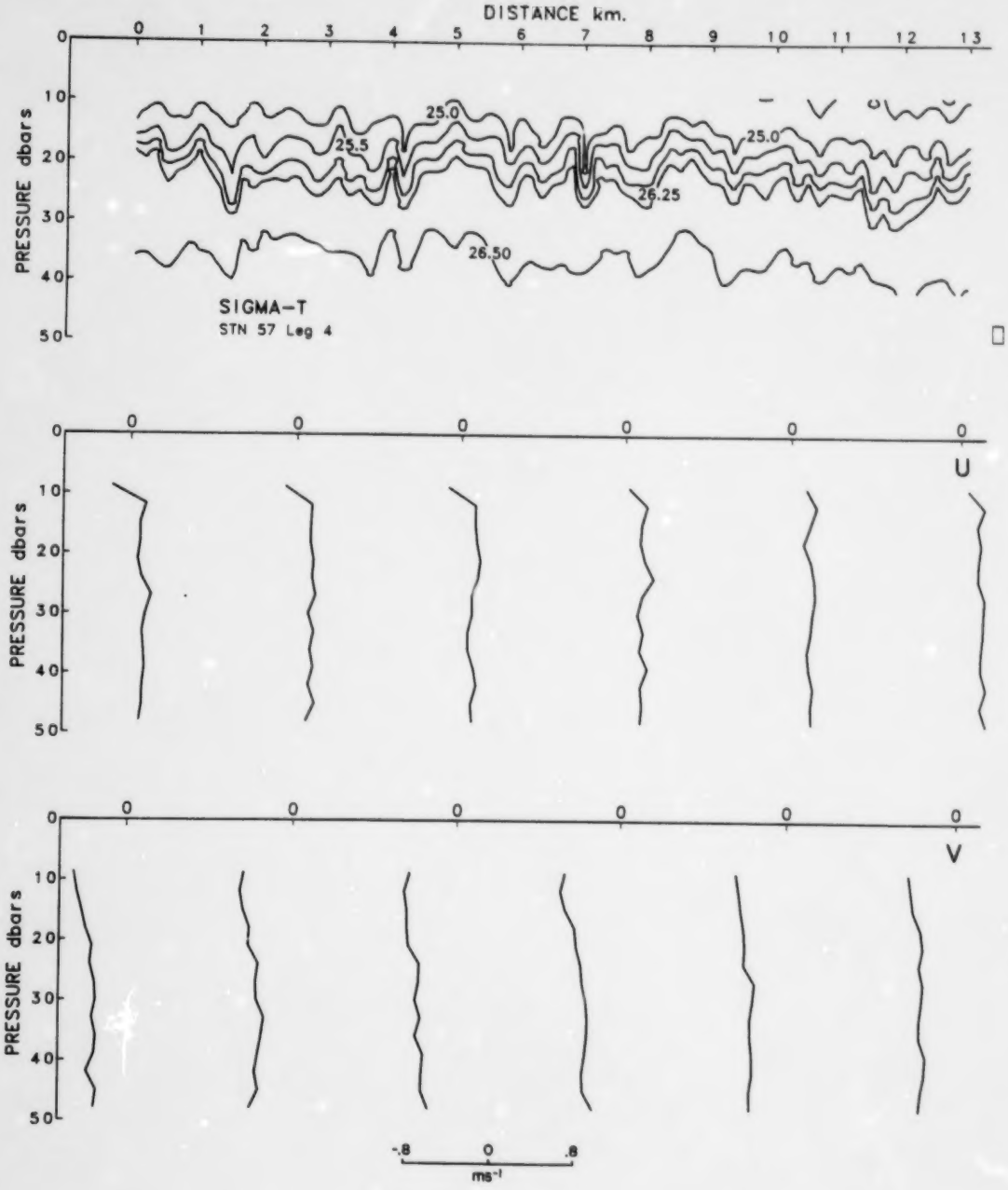

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
25.0
26.25
26.50
SIGMA-T
STN 57 Leg 4
0 0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 277

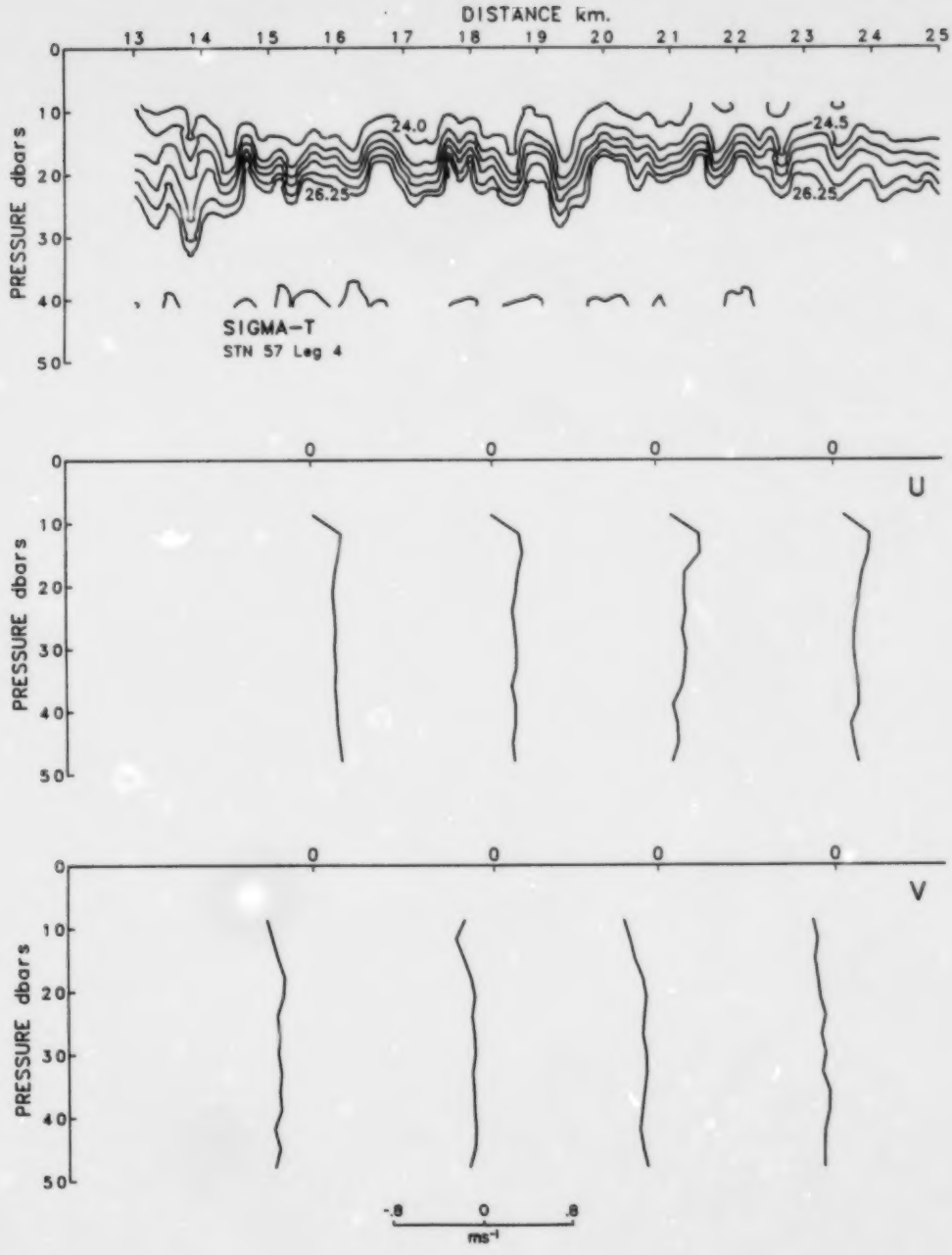

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
26.25
26.25
SIGMA-T
STN 57 Leg 4
U
V
0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 278

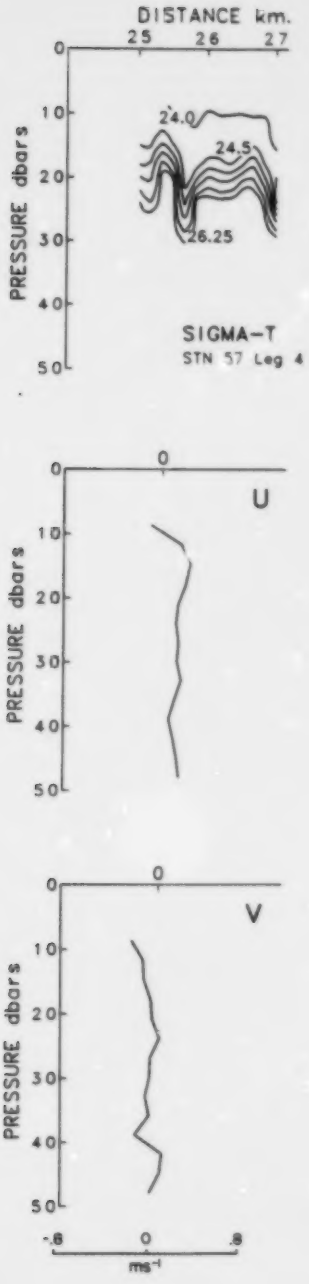
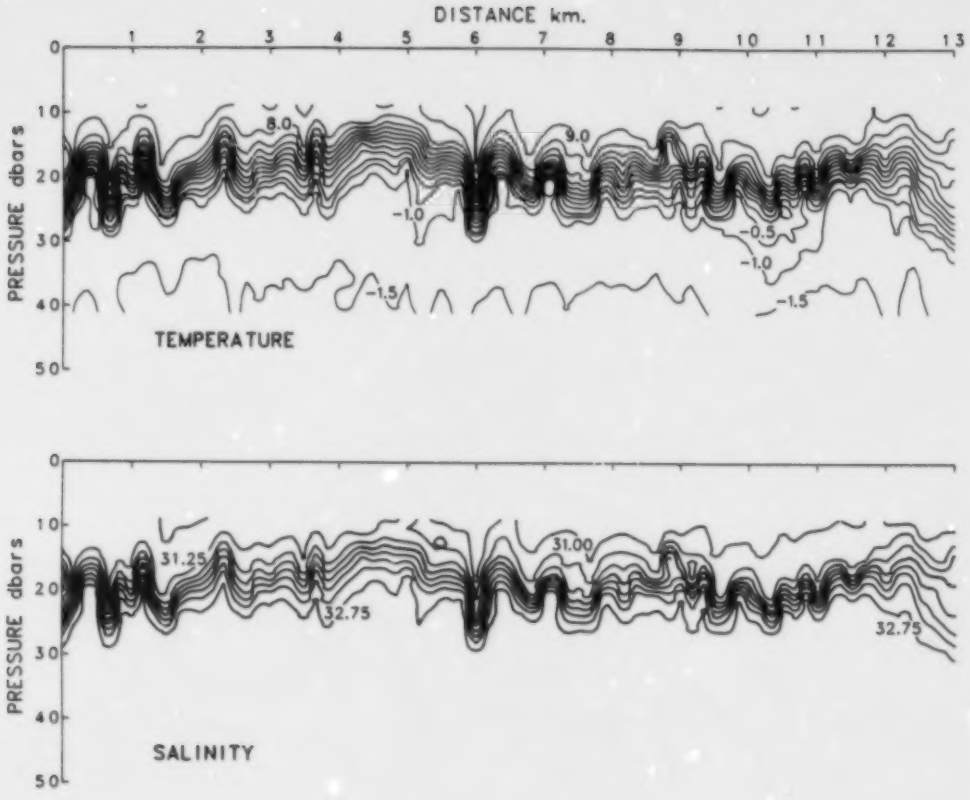
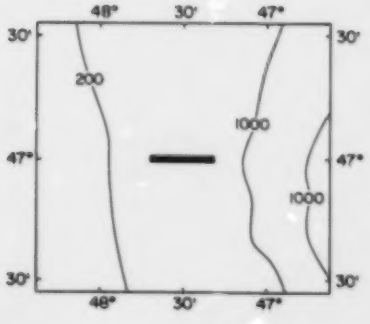

DISTANCE km.
25
26
27
0
10
20
30
40
50
PRESSURE dbars
24.0
24.5
26.25
SIGMA-T
STN 57 Leg 4
0
U
0
10
20
30
40
50
PRESSURE dbars
0
V
0
10
20
30
40
50
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 279


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
8.0
9.0
-1.0
-0.5
-1.0
-1.5
-1.5
TEMPERATURE
PRESSURE dbars
0 10 20 30 40 50
31.25
31.00
32.75
32.75
SALINITY


48°
30'
47°
30'
47°
30'
200
1000
1000
30'
47°
30'
48°
30'
47°

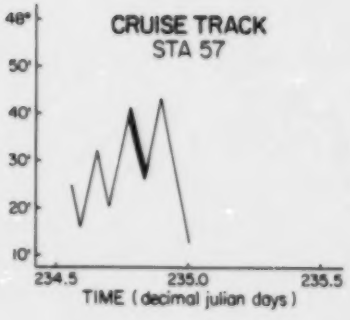

CRUISE TRACK
STA 57
48°
50'
40'
30'
20'
10'
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 280

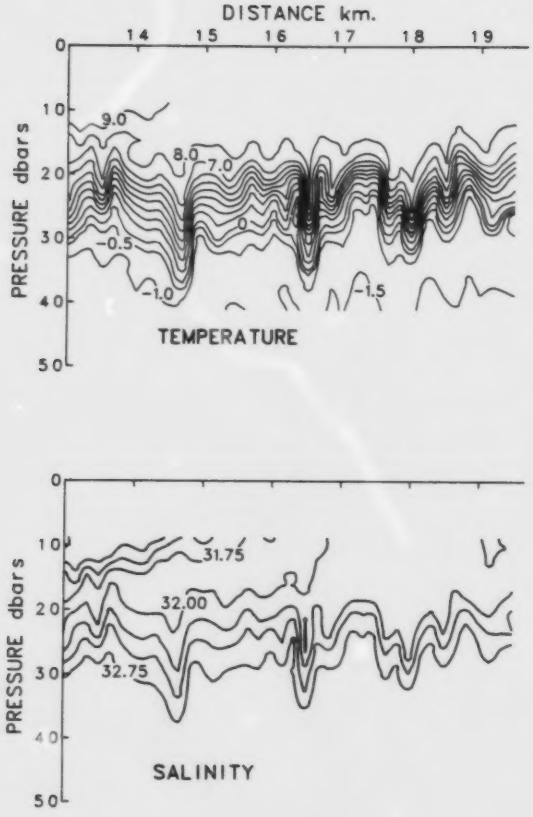

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
7.0
0
-0.5
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.75
SALINITY

Fig. 281

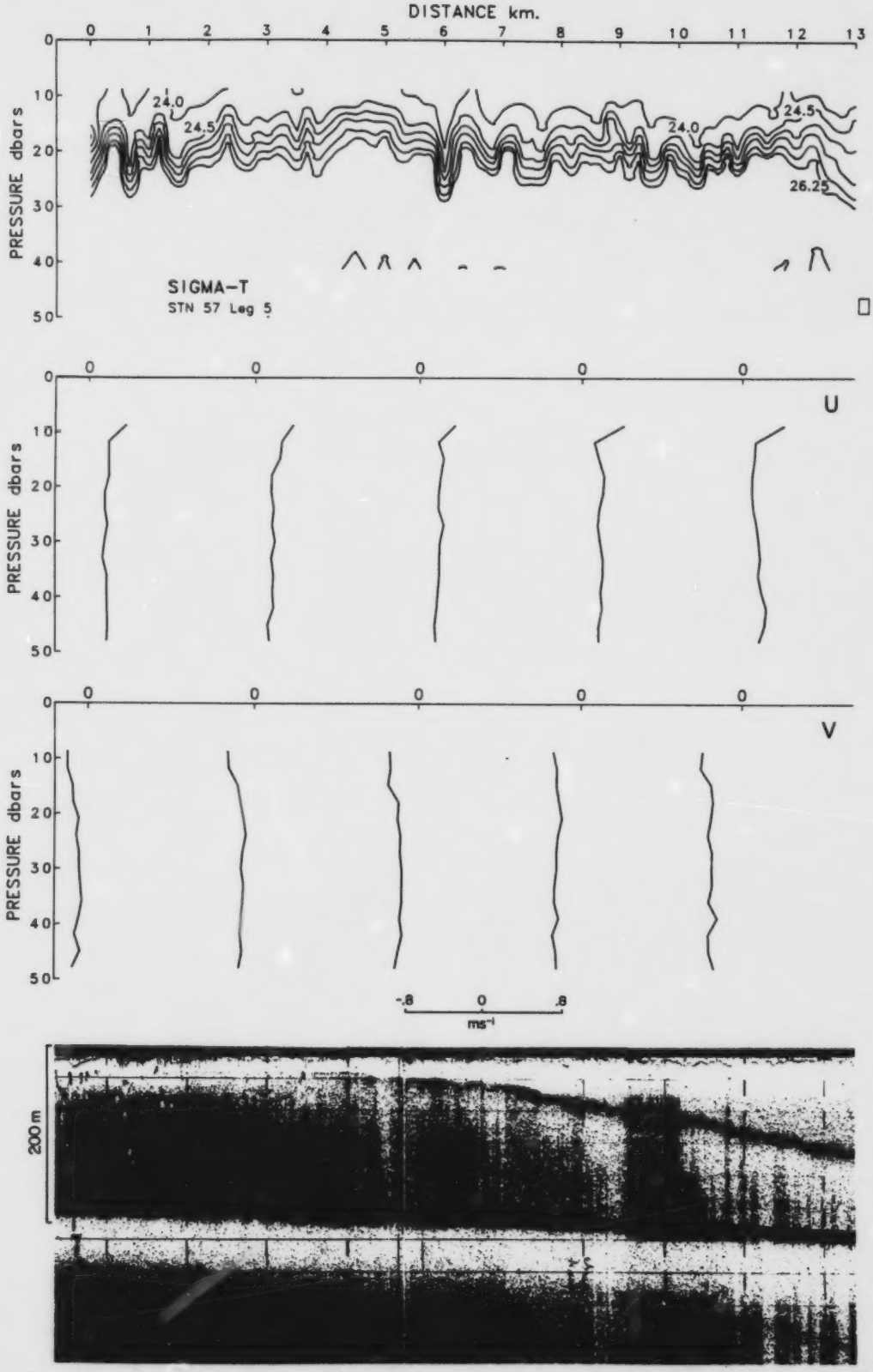

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
24.0
24.5
26.25
SIGMA-T
STN 57 Leg 5
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹
200 m

Fig. 282

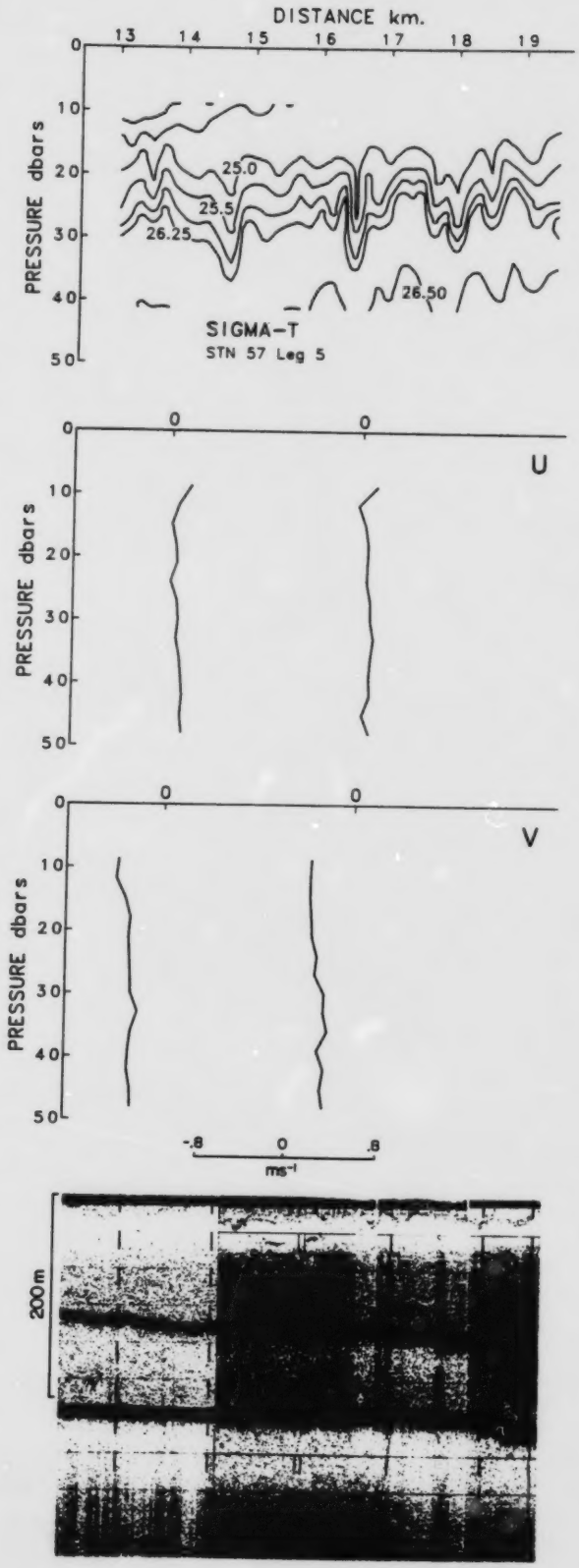

DISTANCE km.
13
14
15
16
17
18
19
PRESSURE dbars
25.0
25.5
26.25
26.50
SIGMA-T
STN 57 Leg 5
U
V
-.8
0
.8
ms⁻¹
200m

Fig. 283

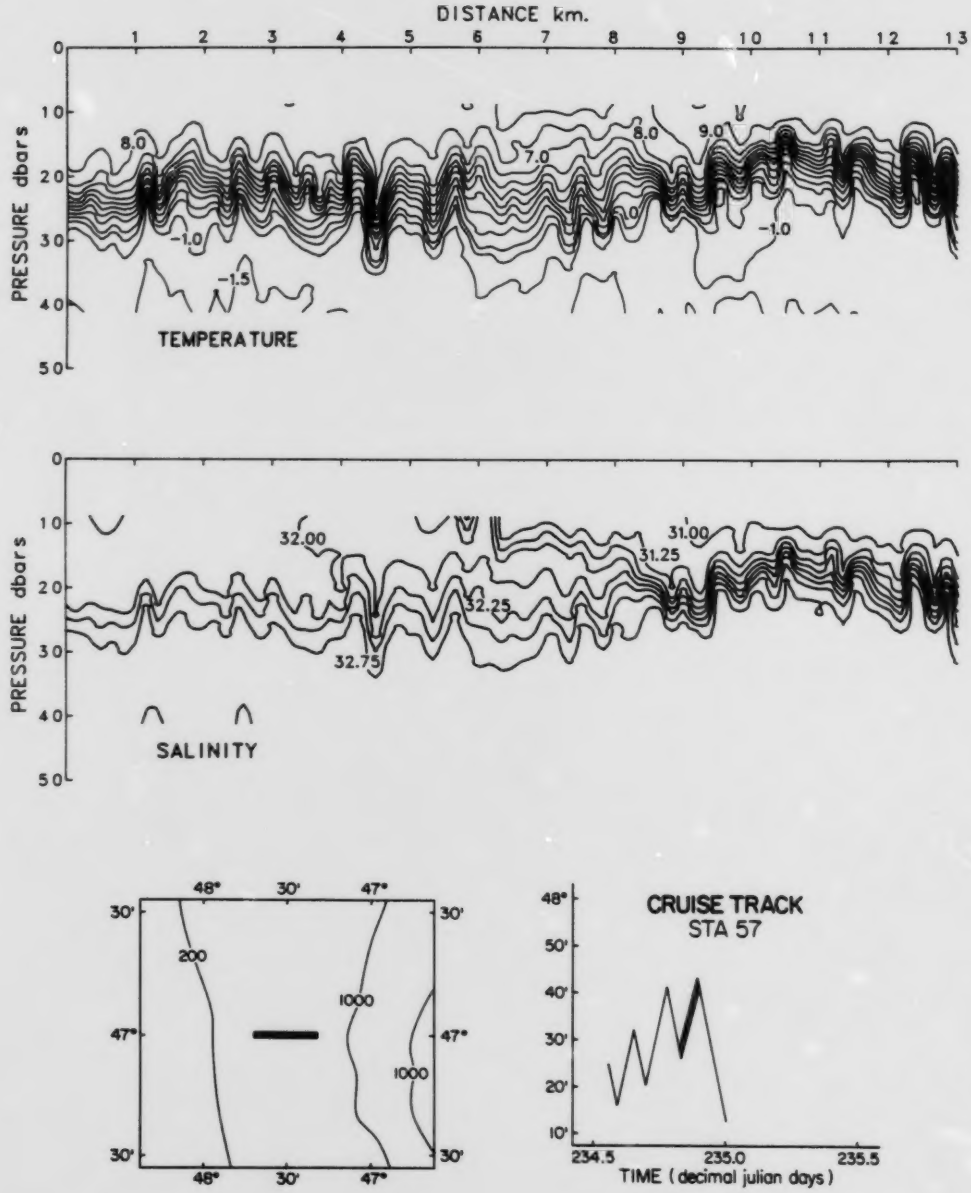

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
7.0
8.0
9.0
-1.0
TEMPERATURE
32.00
32.25
32.75
31.00
31.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 57
50'
40'
20'
10'
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 284

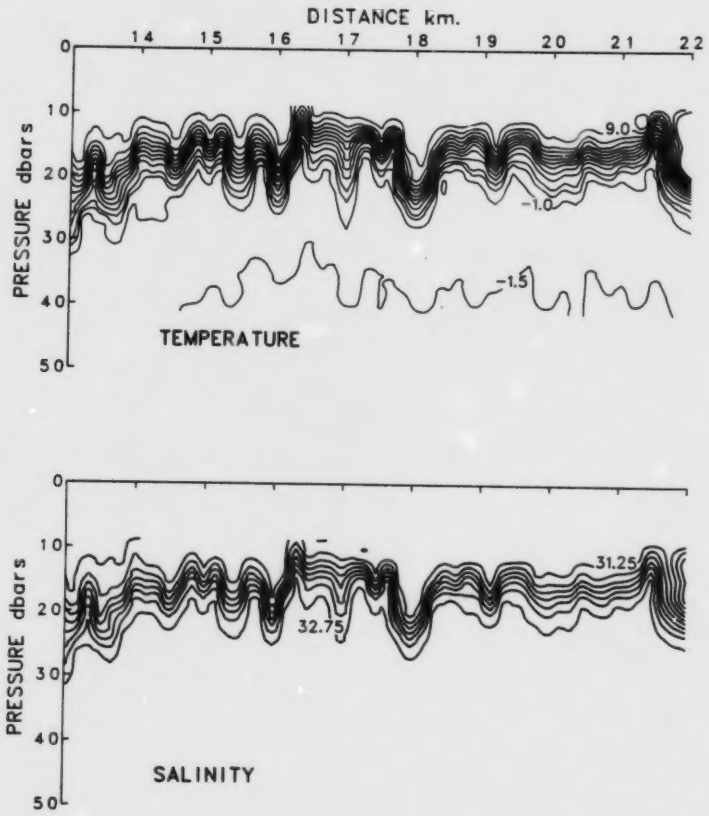

DISTANCE km.
14
15
16
17
18
19
20
21
22
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.25
32.75
SALINITY

Fig. 285

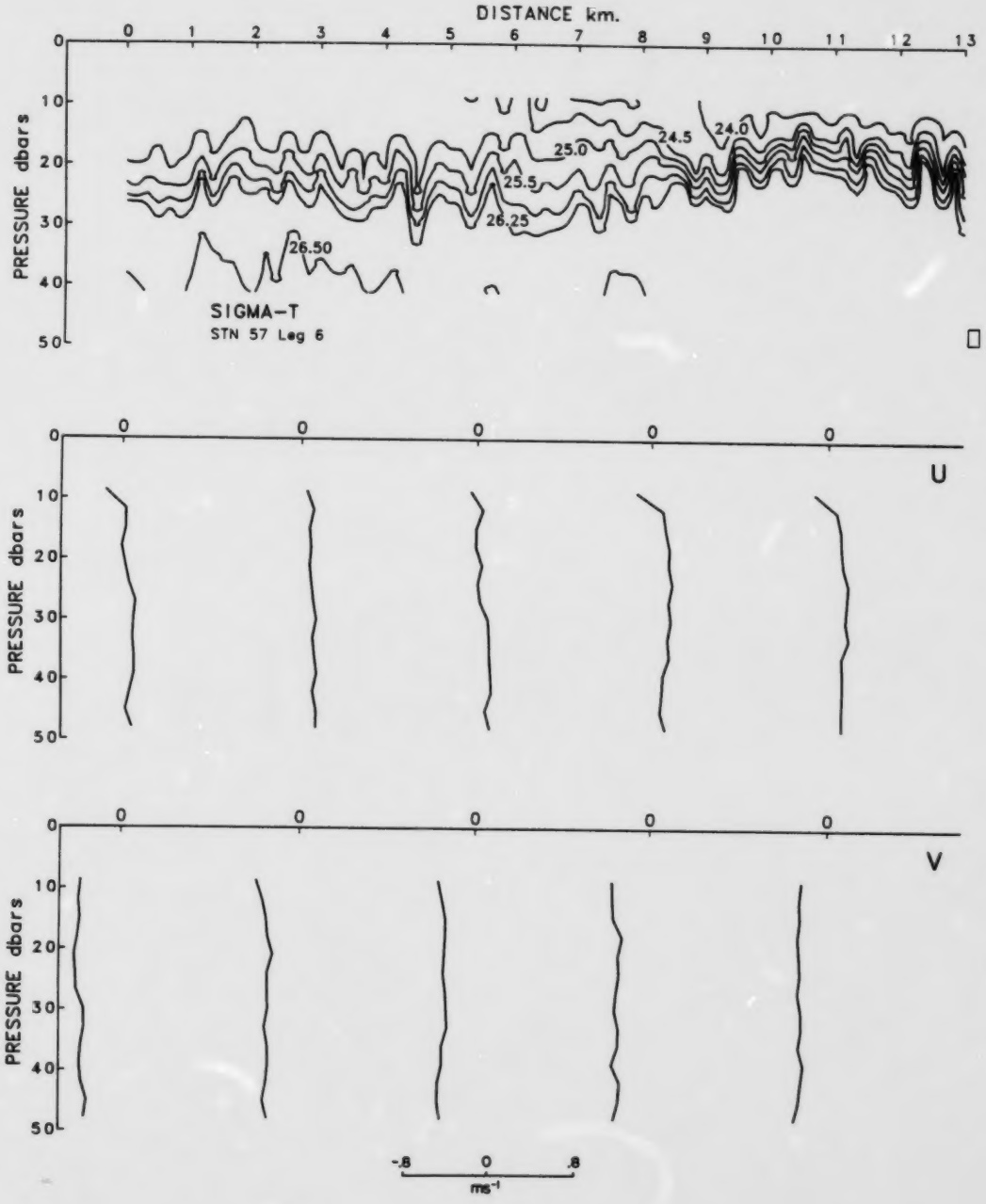

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
25.0
25.5
26.25
26.50
SIGMA-T
STN 57 Leg 6
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 286

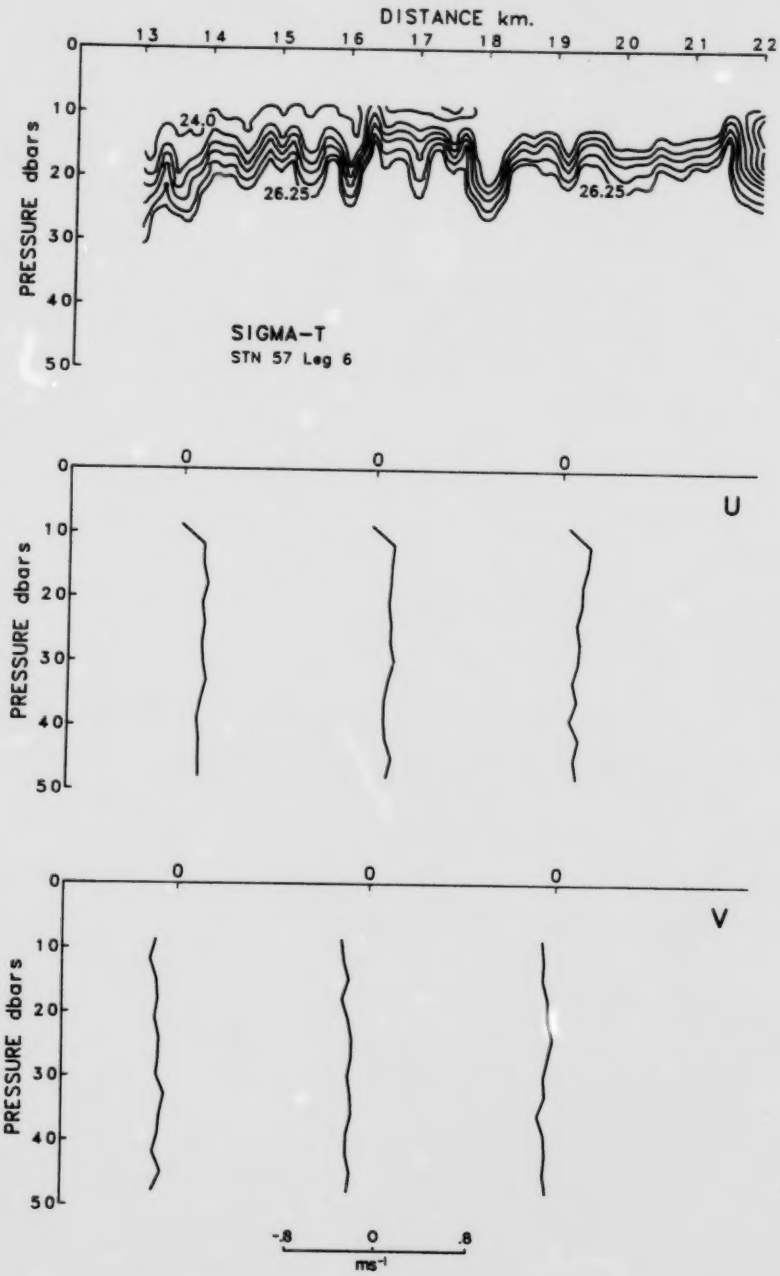

DISTANCE km.
13 14 15 16 17 18 19 20 21 22
0
10
20
30
40
50
PRESSURE dbars
24.0
26.25
26.25
SIGMA-T
STN 57 Leg 6
0 0 0
U
PRESSURE dbars
0 0 0
V
PRESSURE dbars
-.8 0 .8
ms⁻¹

Fig. 287

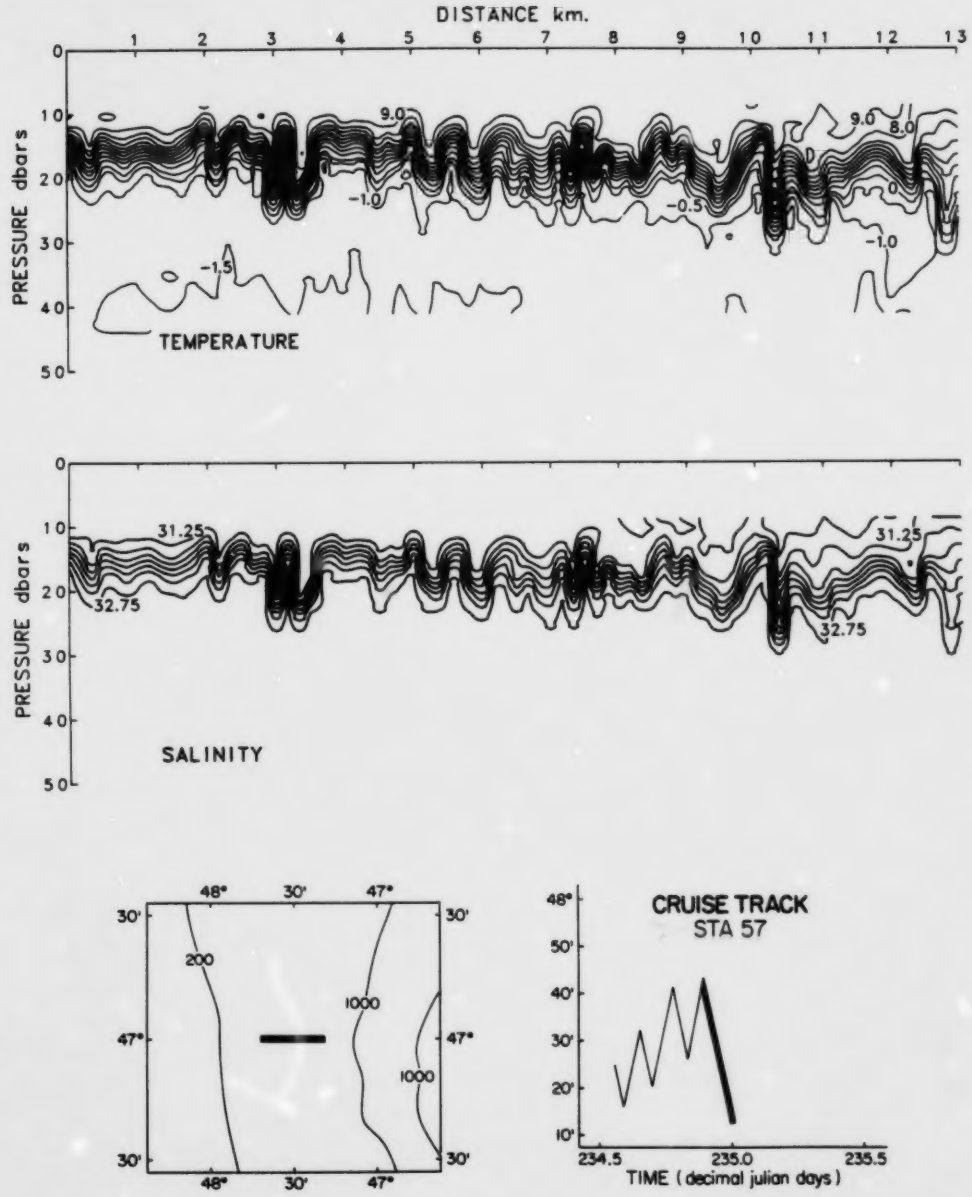

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
9.0
-1.0
-0.5
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.25
32.75
31.25
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 57
48° 50' 40' 30' 20' 10'
234.5 235.0 235.5
TIME (decimal julian days)

Fig. 288

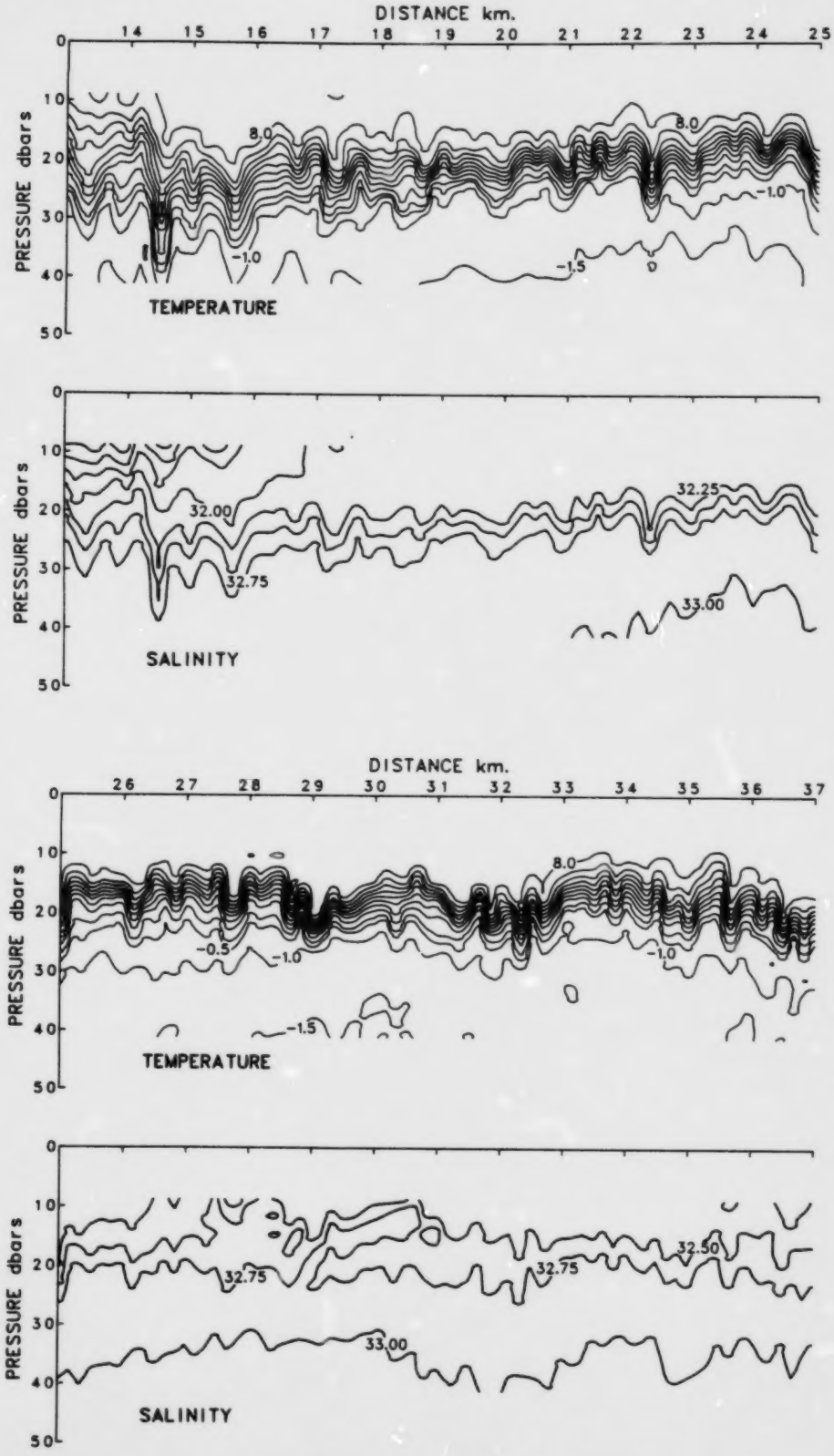

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
8.0
8.0
-1.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.75
33.00
SALINITY
DISTANCE km.
26 27 28 29 30 31 32 33 34 35 36 37
8.0
-0.5
-1.0
-1.0
-1.5
TEMPERATURE
32.75
32.75
32.50
33.00
SALINITY

Fig. 289

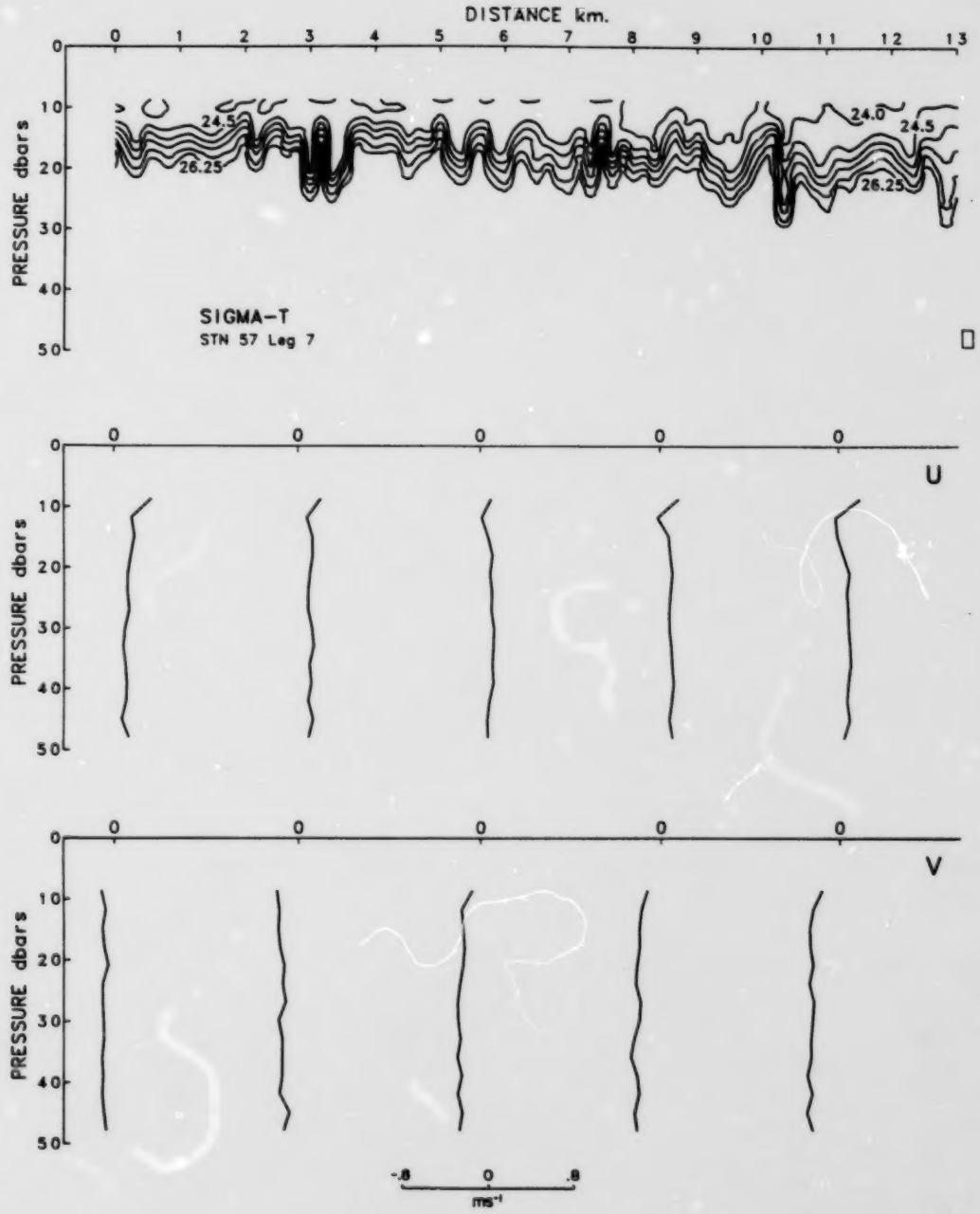

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
26.25
24.0
24.5
26.25
SIGMA-T
STN 57 Leg 7
U
V
-.8 0 .8
ms⁻¹

Fig. 290

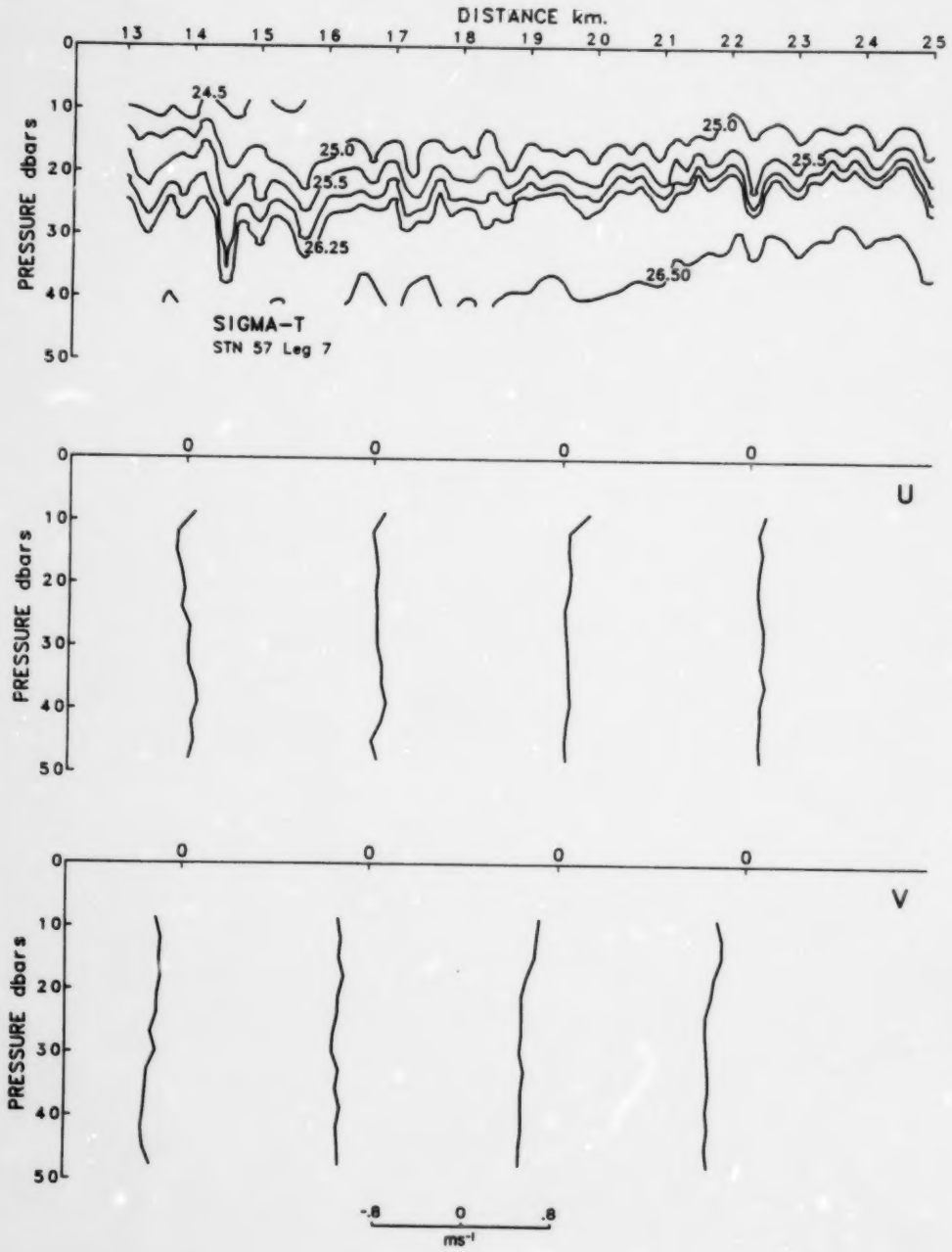

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
25.5
26.25
25.0
25.5
26.50
SIGMA-T
STN 57 Leg 7
0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 291

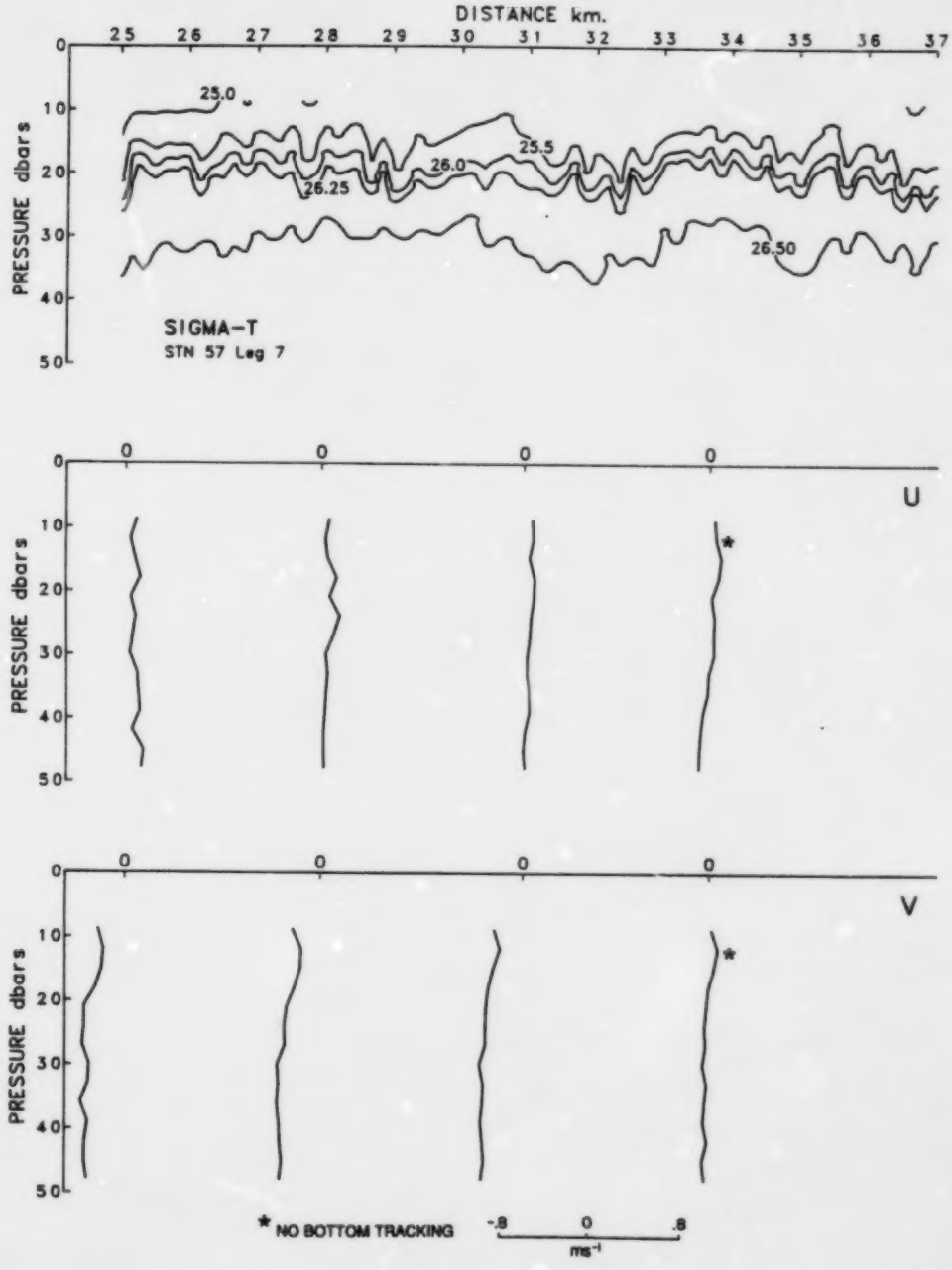

DISTANCE km.
25 26 27 28 29 30 31 32 33 34 35 36 37
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 57 Leg 7
0 0 0 0
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 292

Figures 293-314

BATFISH station 58; 6 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

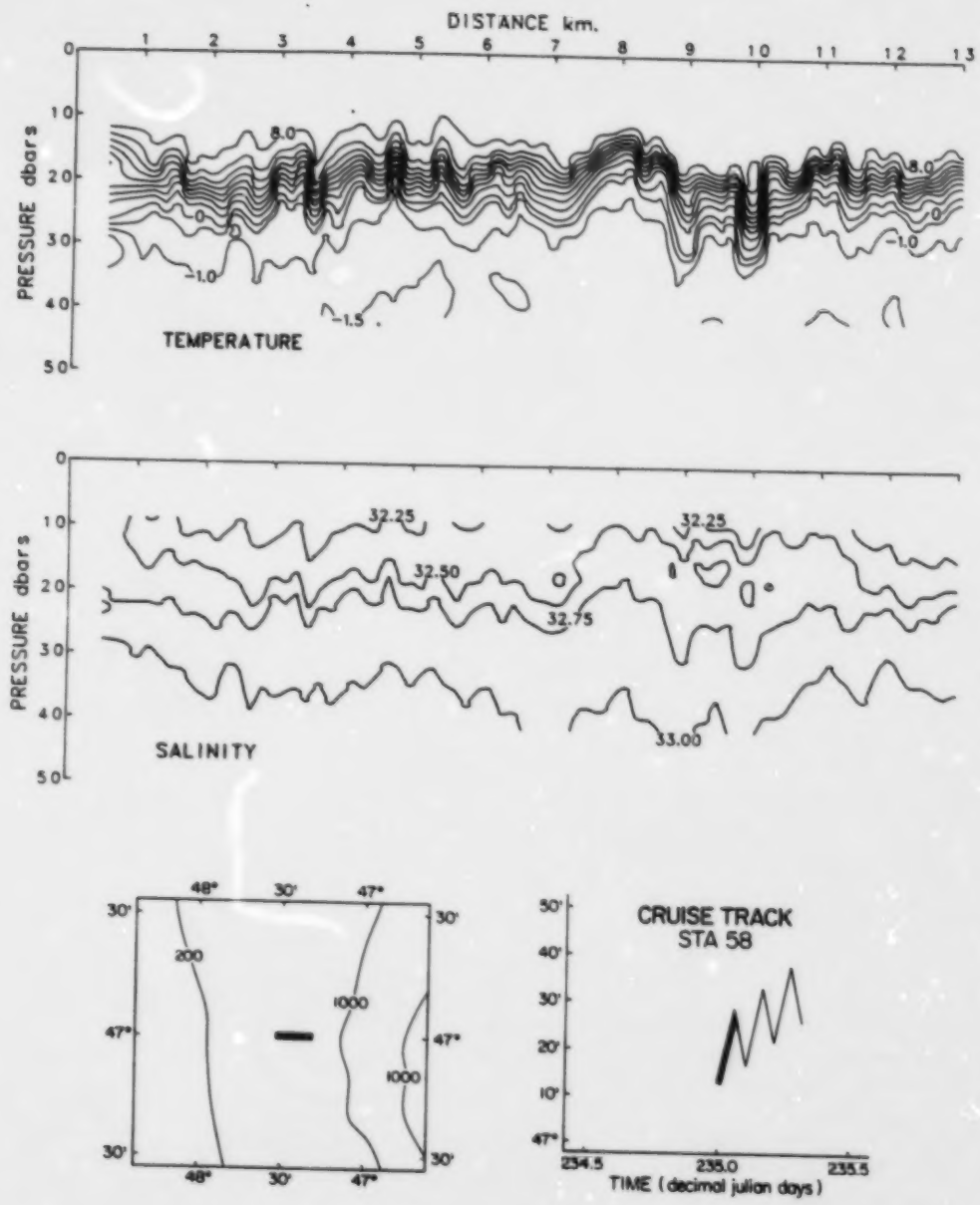

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
8.0
0
-1.0
-1.5
TEMPERATURE
32.25
32.50
32.75
33.00
SALINITY
48° 30' 47°
200
1000
CRUISE TRACK
STA 58
234.5 235.0 235.5
TIME (decimal julian days)

Fig. 293

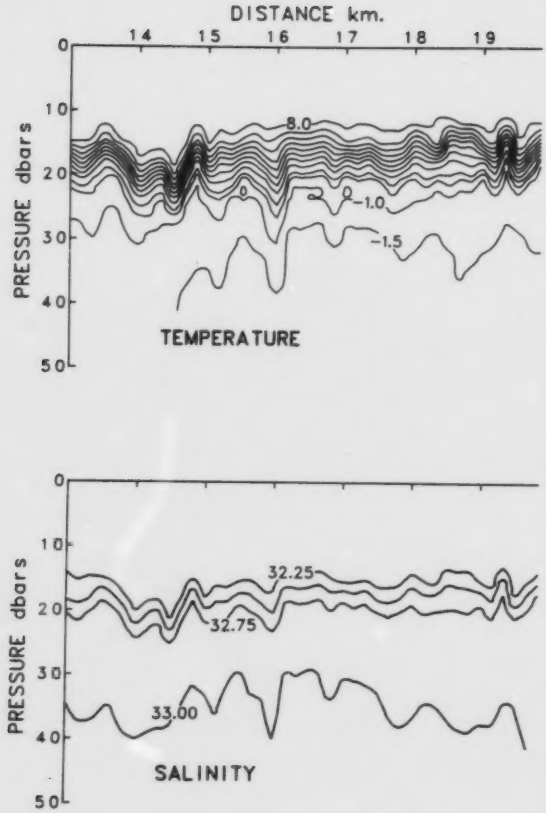

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
8.0
0
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.25
32.75
33.00
SALINITY

Fig. 294

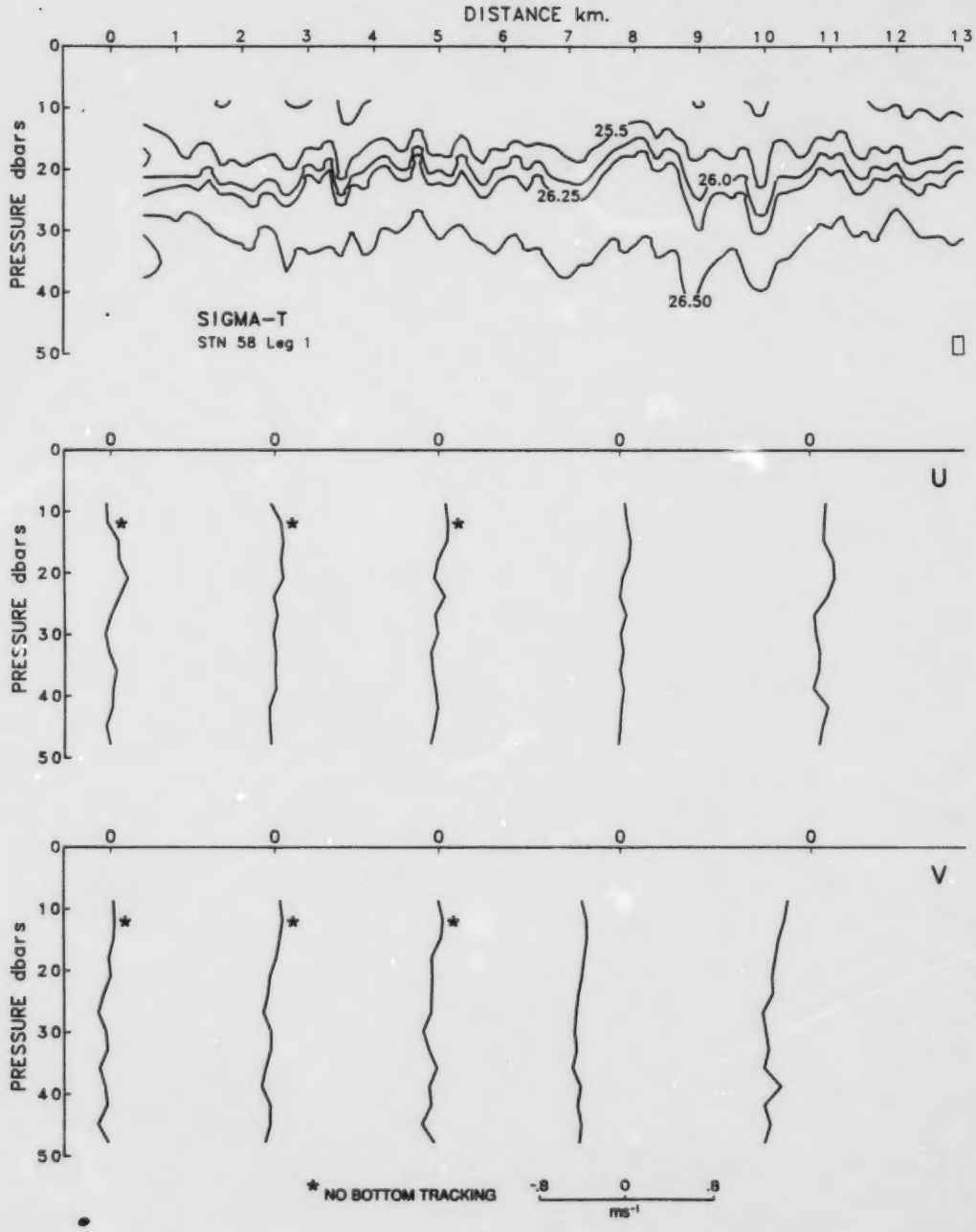

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.5
26.25
26.0
26.50
SIGMA-T
STN 58 Leg 1
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 295

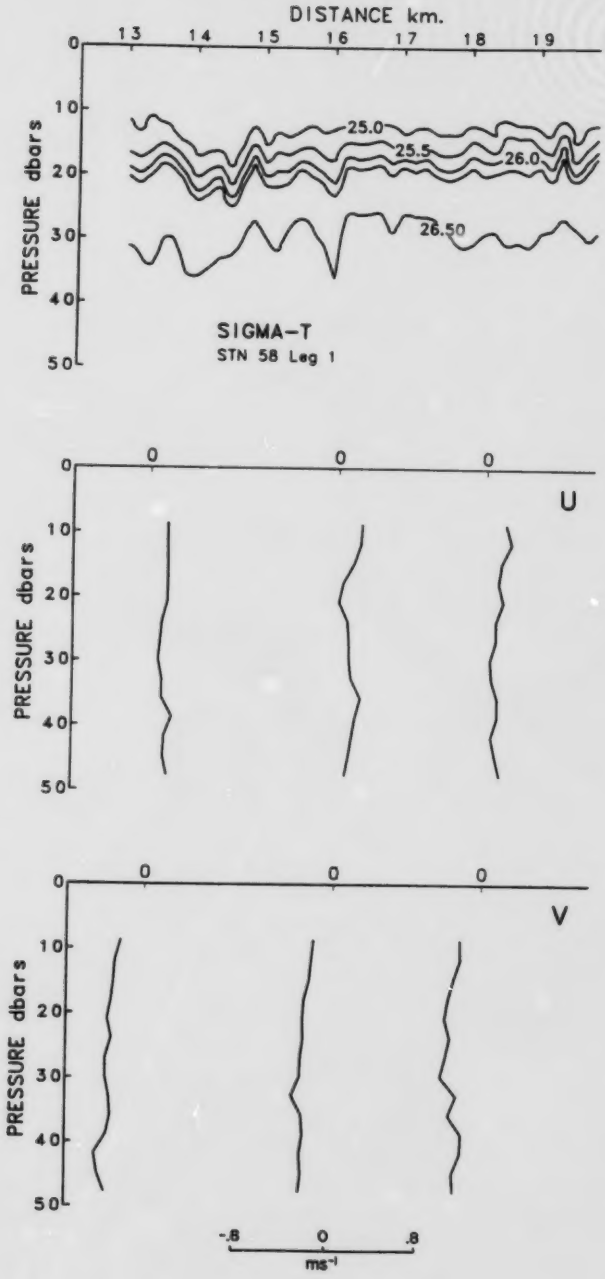

DISTANCE km.
13
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
25.0
25.5
26.0
26.50
SIGMA-T
STN 58 Leg 1
0
0
0
U
V
-.8
0
.8
ms⁻¹

Fig. 296

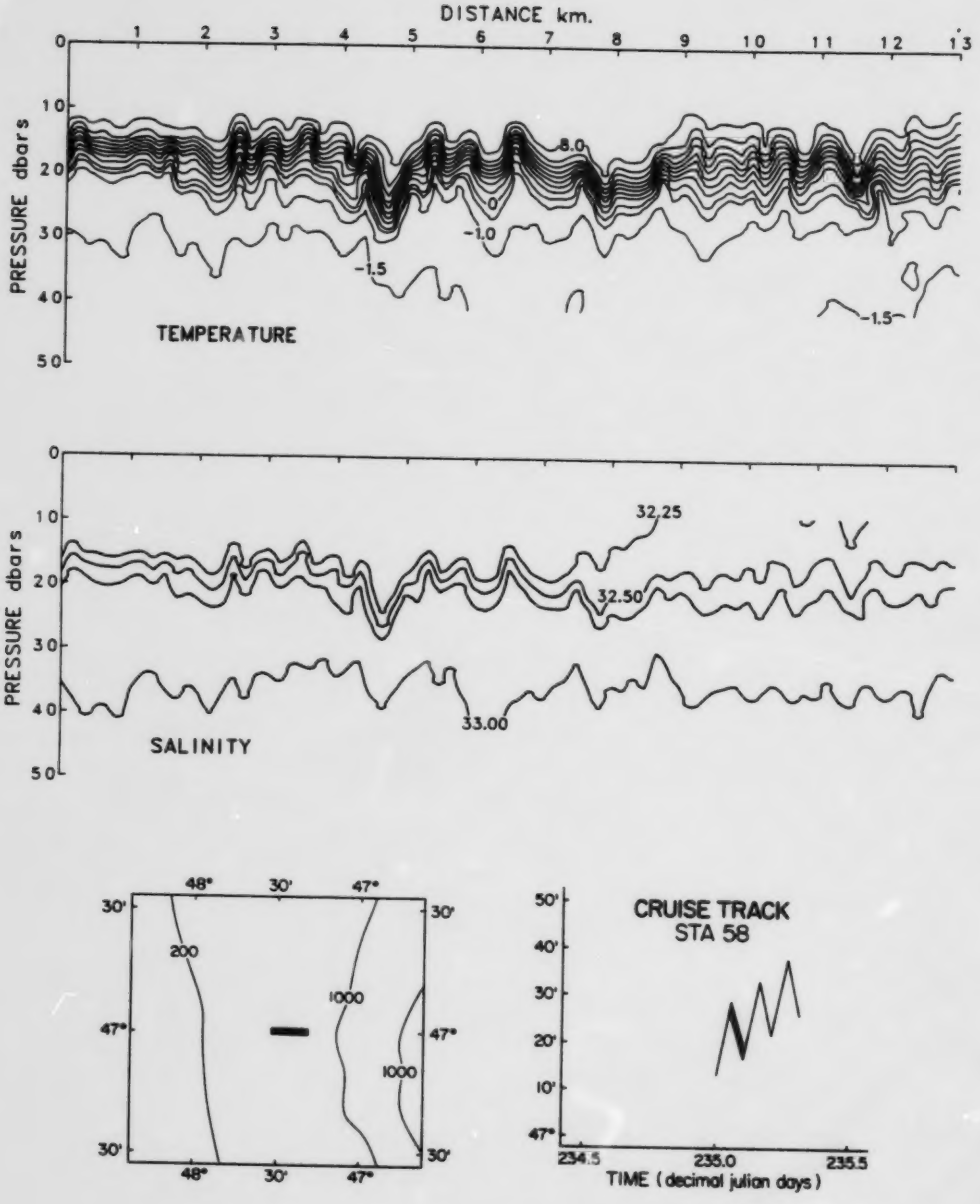
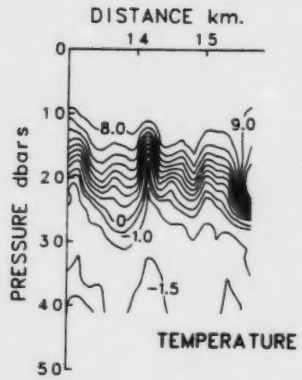

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
8.0
0
-1.0
-1.5
-1.5
TEMPERATURE
0 10 20 30 40 50
32.25
32.50
33.00
PRESSURE dbars
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 58
50' 40' 30' 20' 10'
47°
234.5 235.0 235.5
TIME (decimal julian days)

Fig. 297


DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
9.0
0
-1.0
-1.5
TEMPERATURE

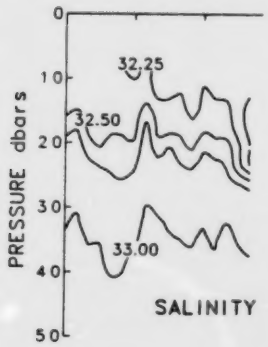

0
10
20
30
40
50
PRESSURE dbars
32.25
32.50
33.00
SALINITY

Fig. 298

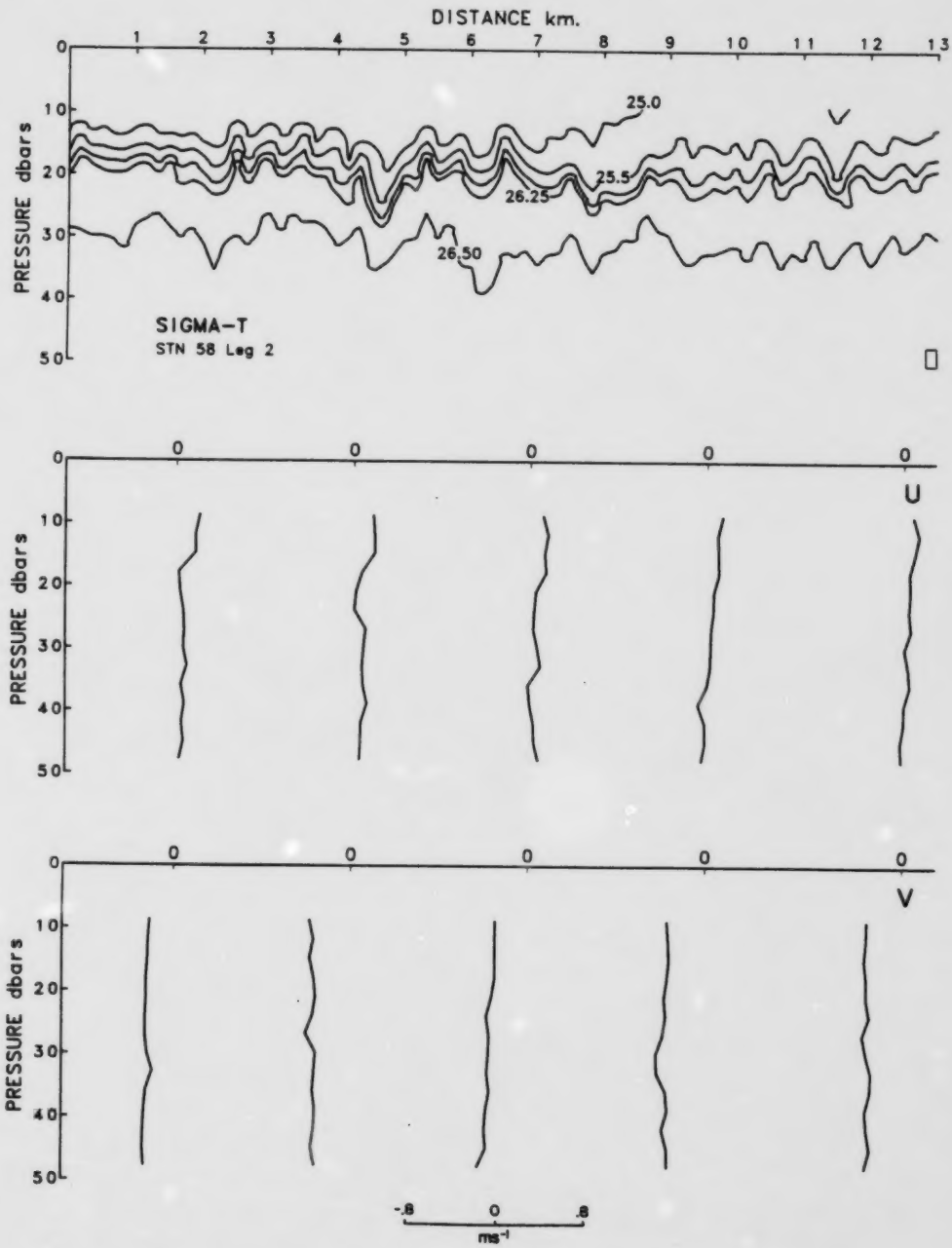

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.25
26.50
V
SIGMA-T
STN 58 Leg 2
U
0 0 0 0 0
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 299

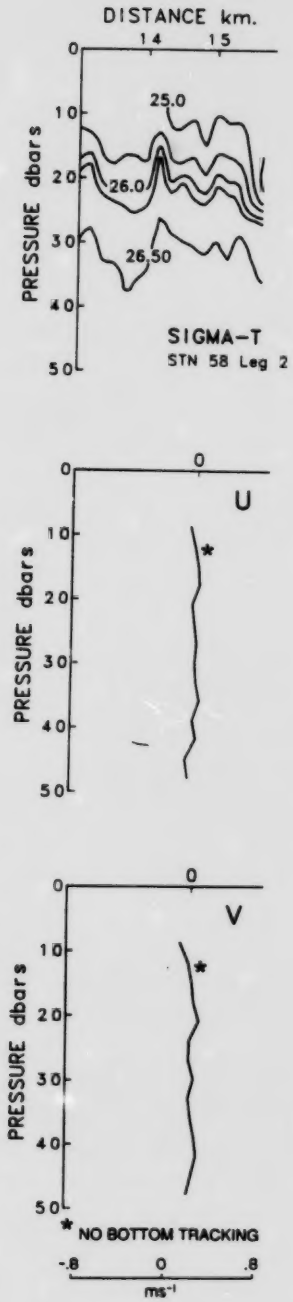

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
25.0
26.0
26.50
SIGMA-T
STN 58 Leg 2
0
U
V
*
NO BOTTOM TRACKING
-.8
0
.8
ms⁻¹

Fig. 300

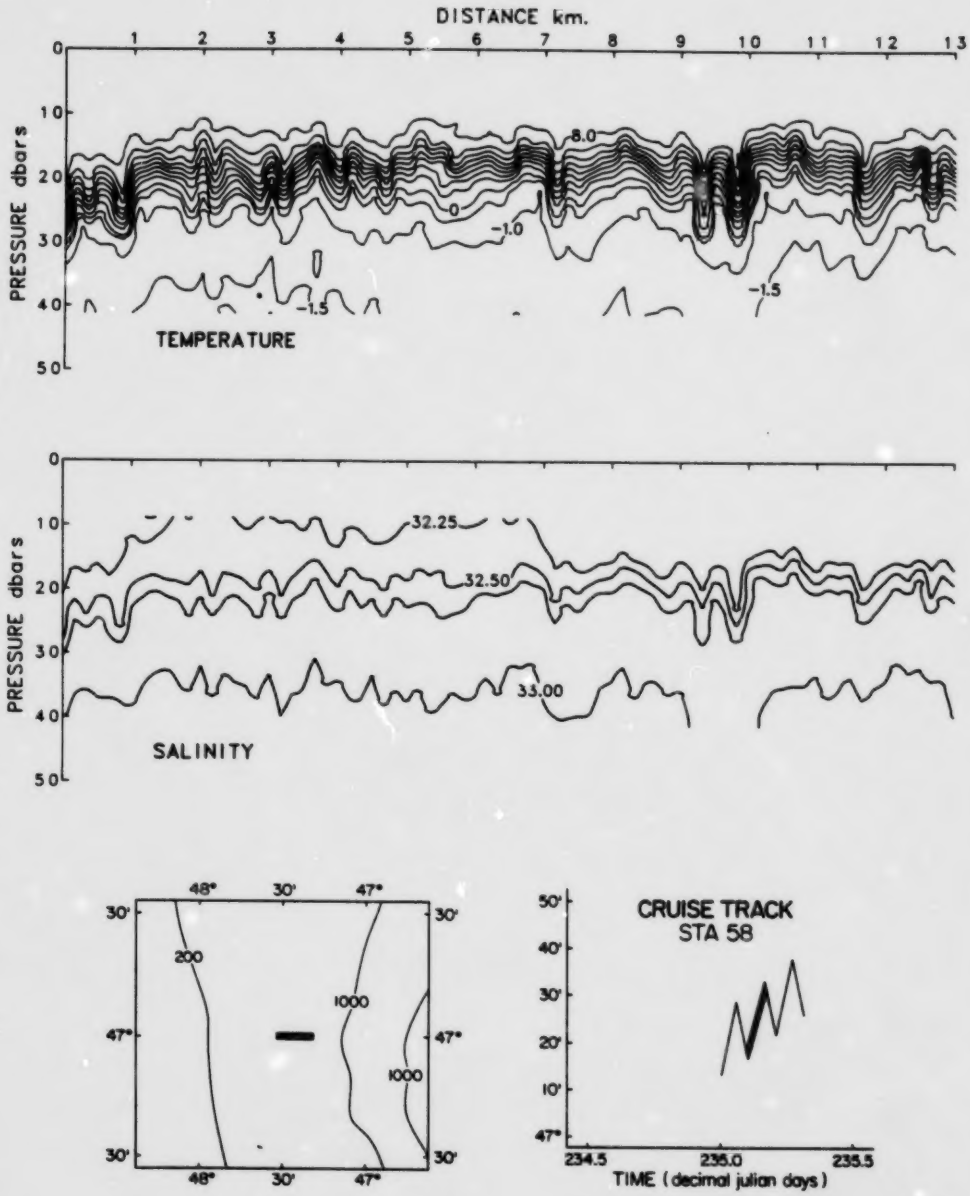

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
0
-1.0
-1.5
-1.5
TEMPERATURE
32.25
32.50
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 58
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 301

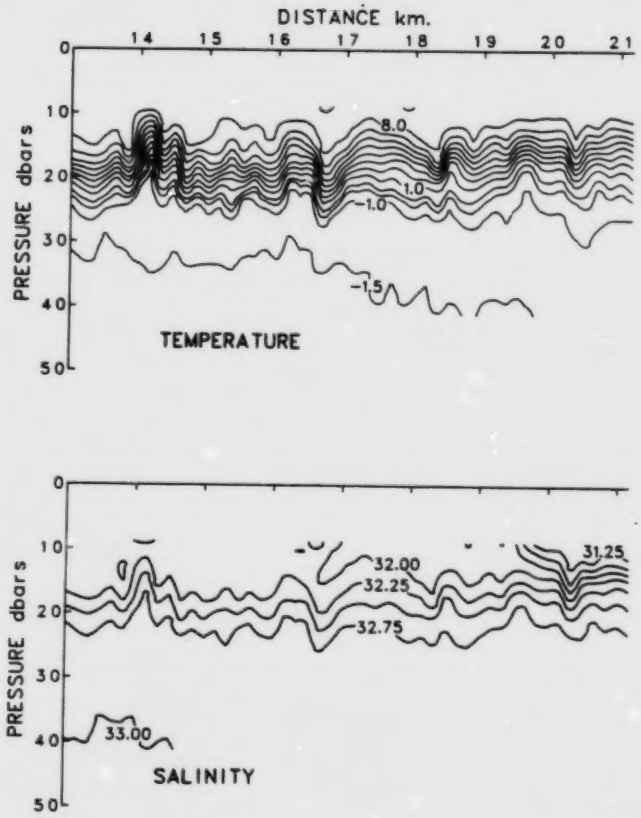

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
8.0
1.0
-1.0
-1.5
TEMPERATURE
31.25
32.00
32.25
32.75
33.00
SALINITY

Fig. 302

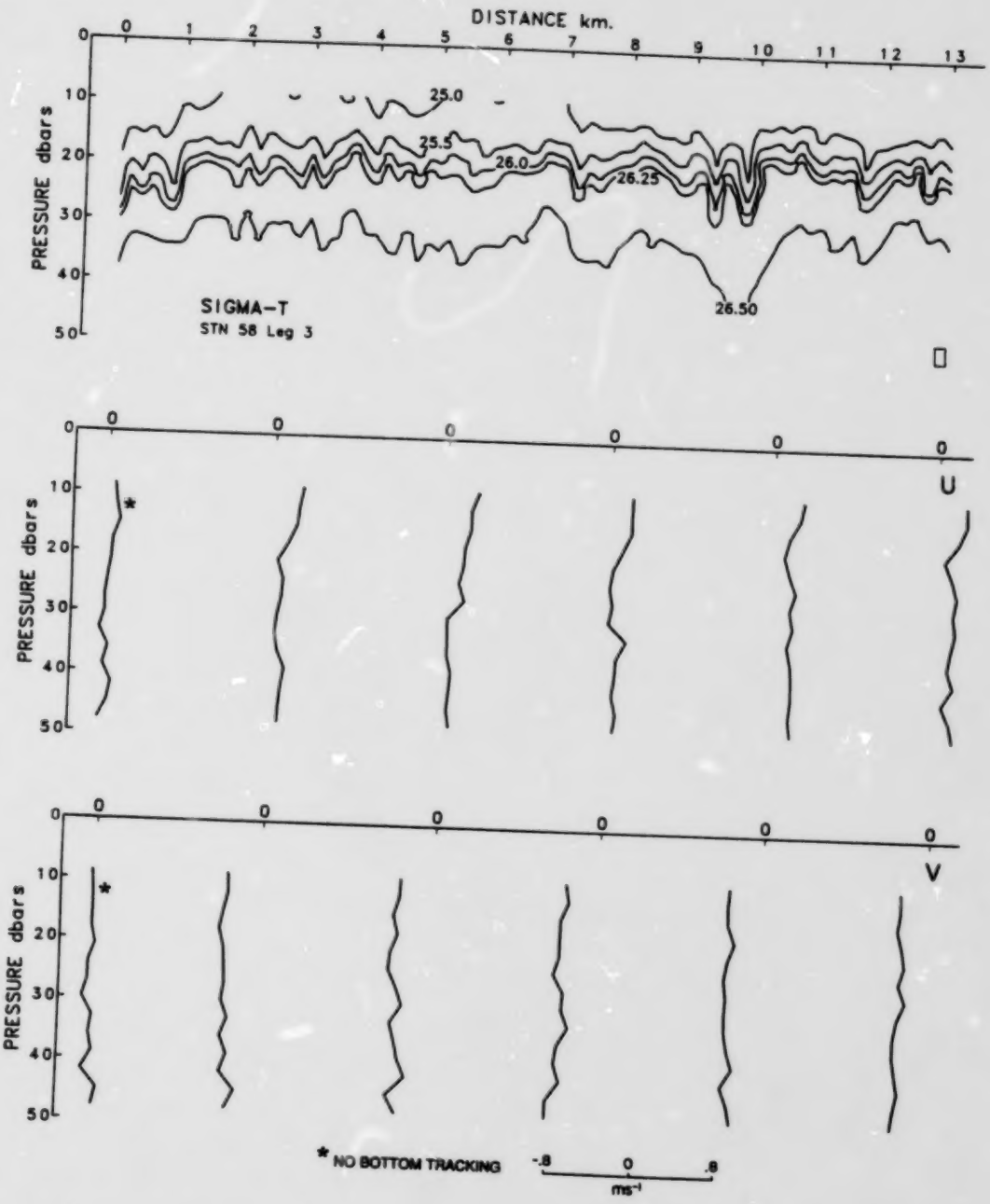

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 58 Leg 3
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 303

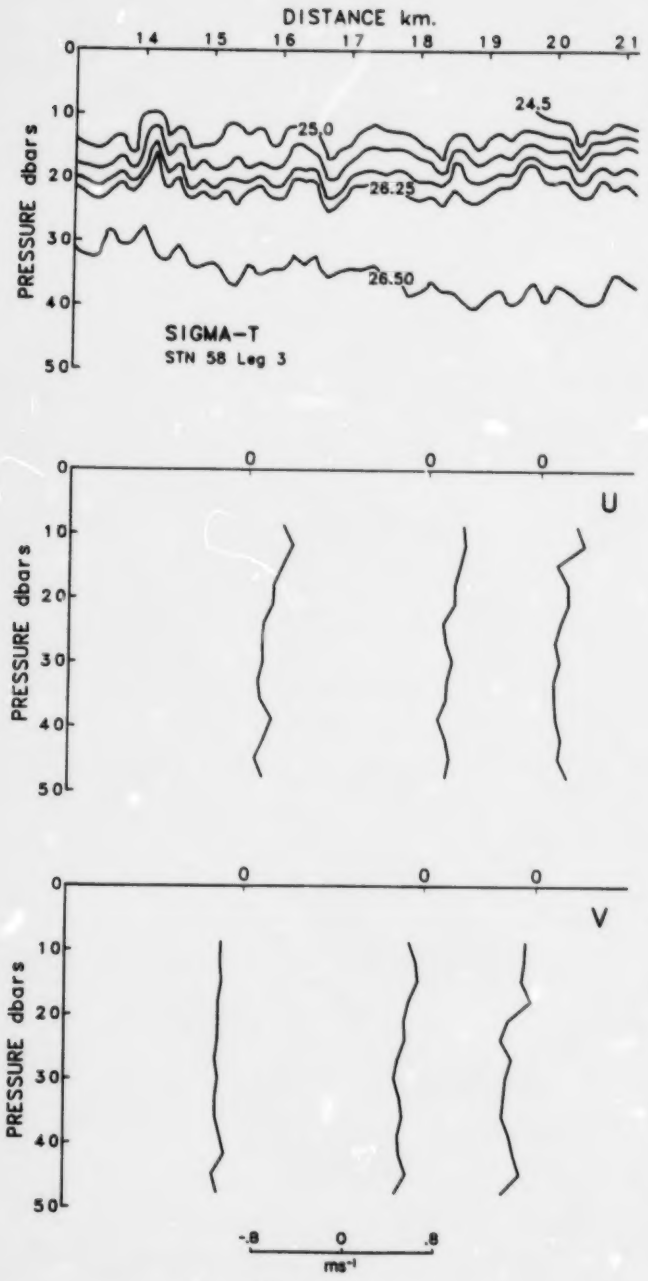

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.25
26.50
SIGMA-T
STN 58 Leg 3
U
V
-.8
.8
ms⁻¹

Fig. 304

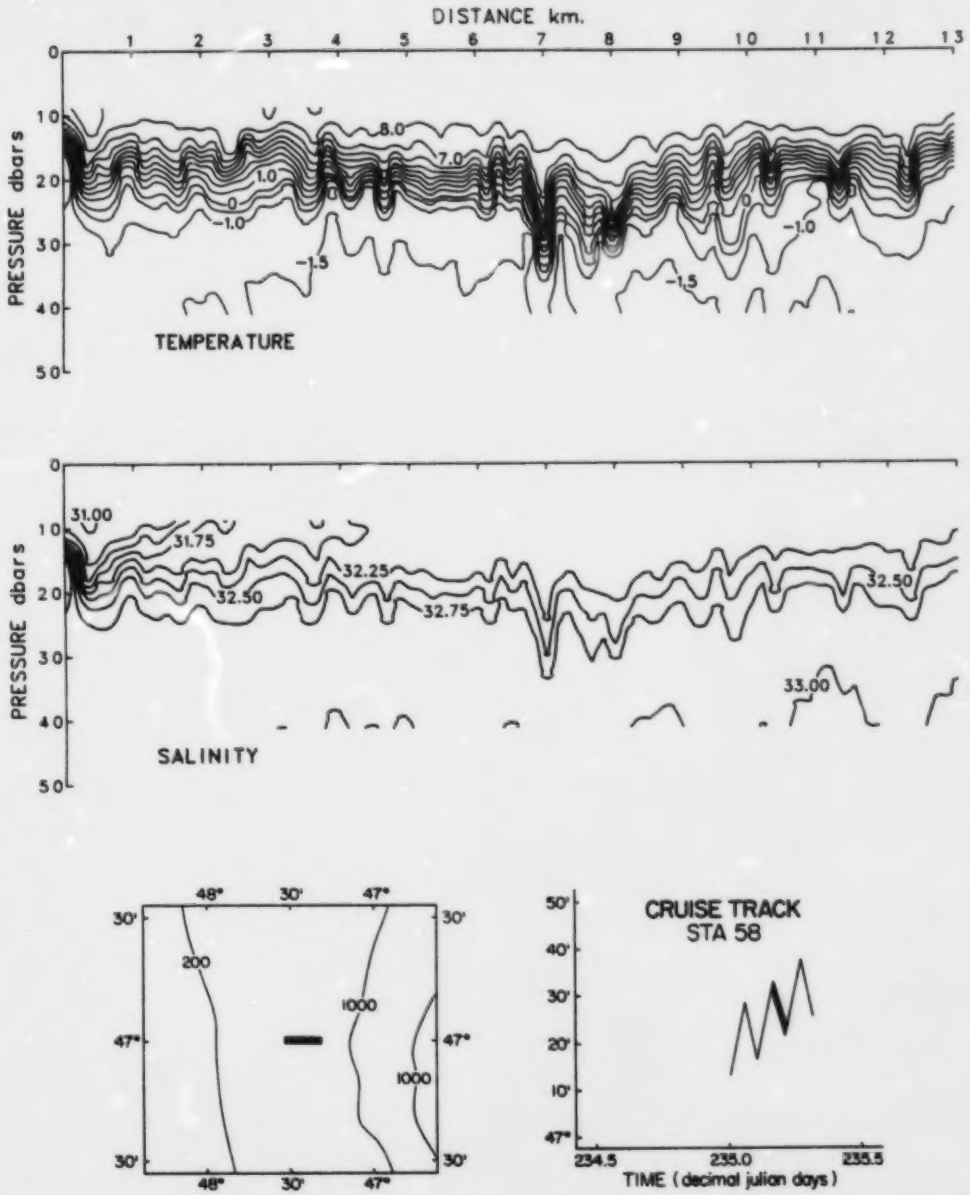

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
1.0
0
-1.0
-1.5
TEMPERATURE
31.00
31.75
32.25
32.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 58
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 305

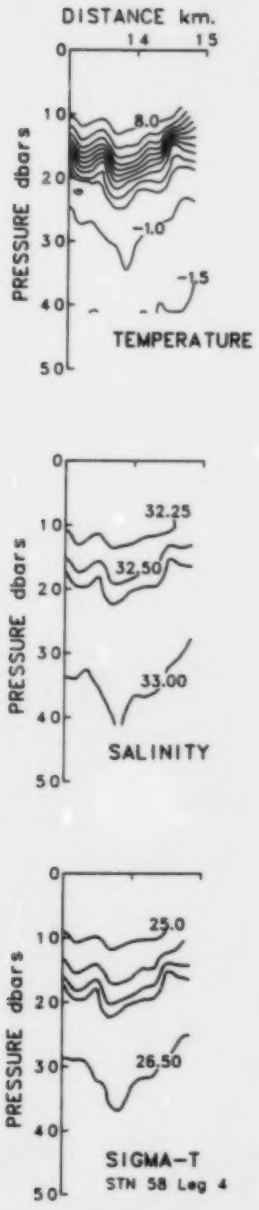

DISTANCE km.
0
14
15
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
32.25
32.50
33.00
SALINITY
25.0
26.50
SIGMA-T
STN 58 Leg 4

Fig. 306

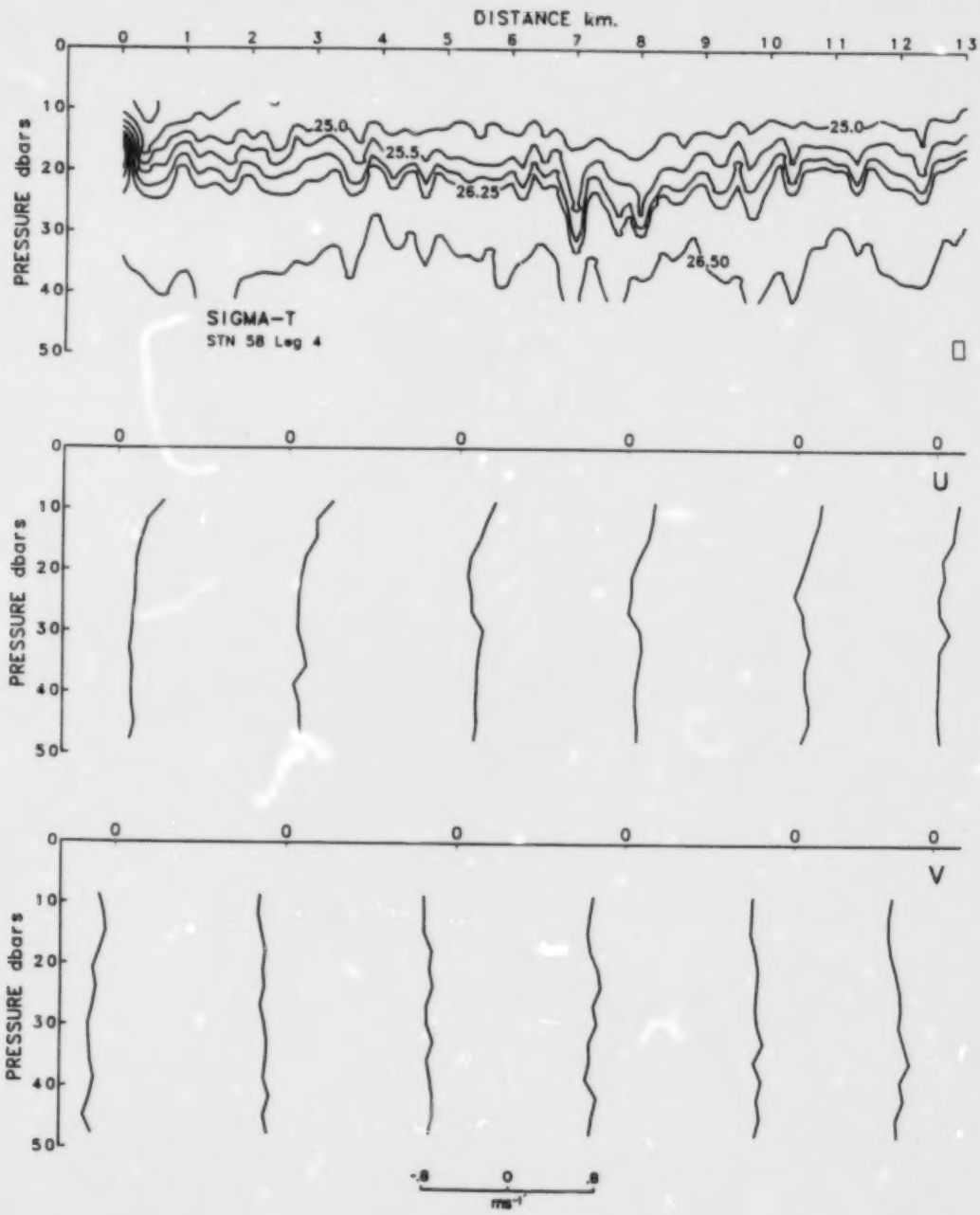

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
25.0
25.5
26.25
26.50
SIGMA-T
STN 58 Leg 4
U
V
-.8 0 .8
ms⁻¹

Fig. 307

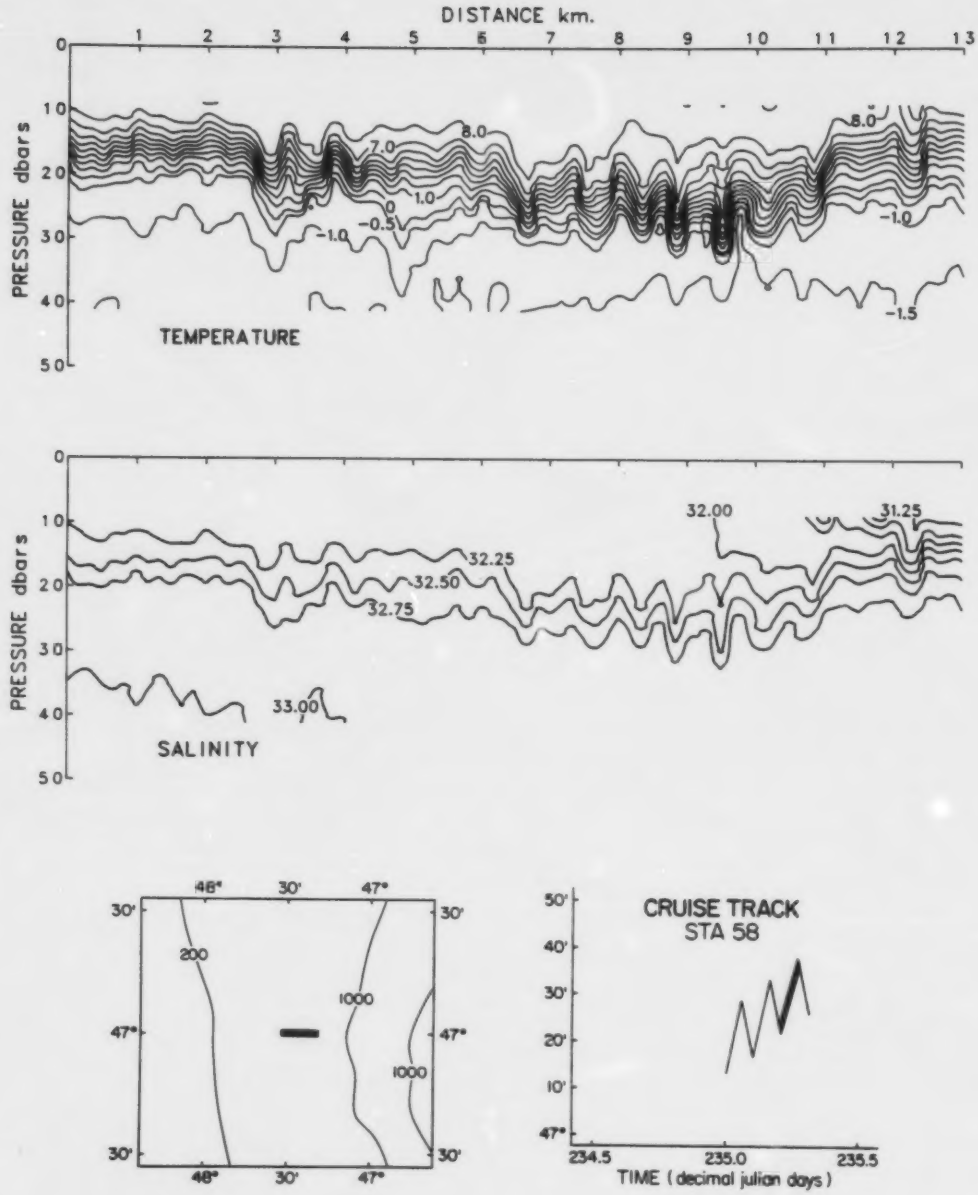

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
8.0
7.0
1.0
0
-0.5
-1.0
-1.5
TEMPERATURE
32.00
31.25
32.25
32.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 58
234.5
235.0
235.5
TIME (decimal julian days)

Fig. 308

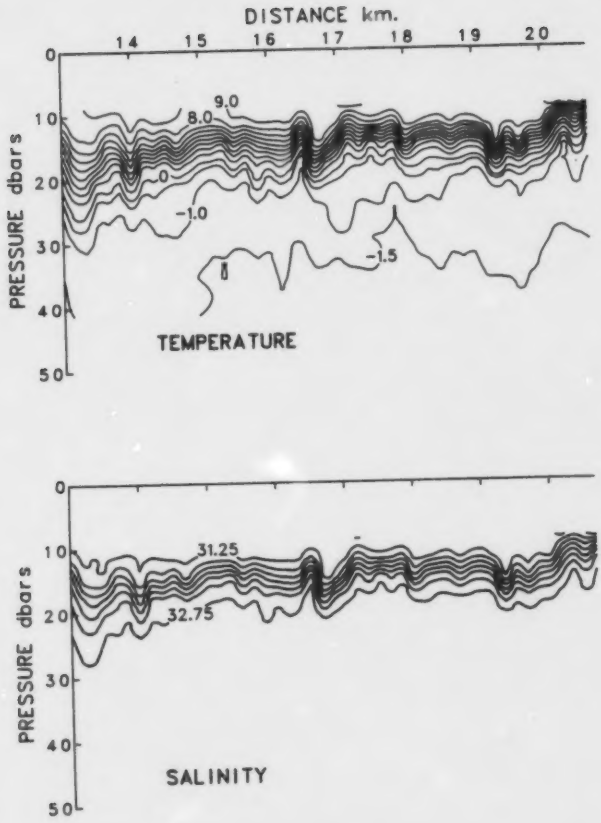

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
0
-1.0
-1.5
TEMPERATURE
31.25
32.75
SALINITY

Fig. 309

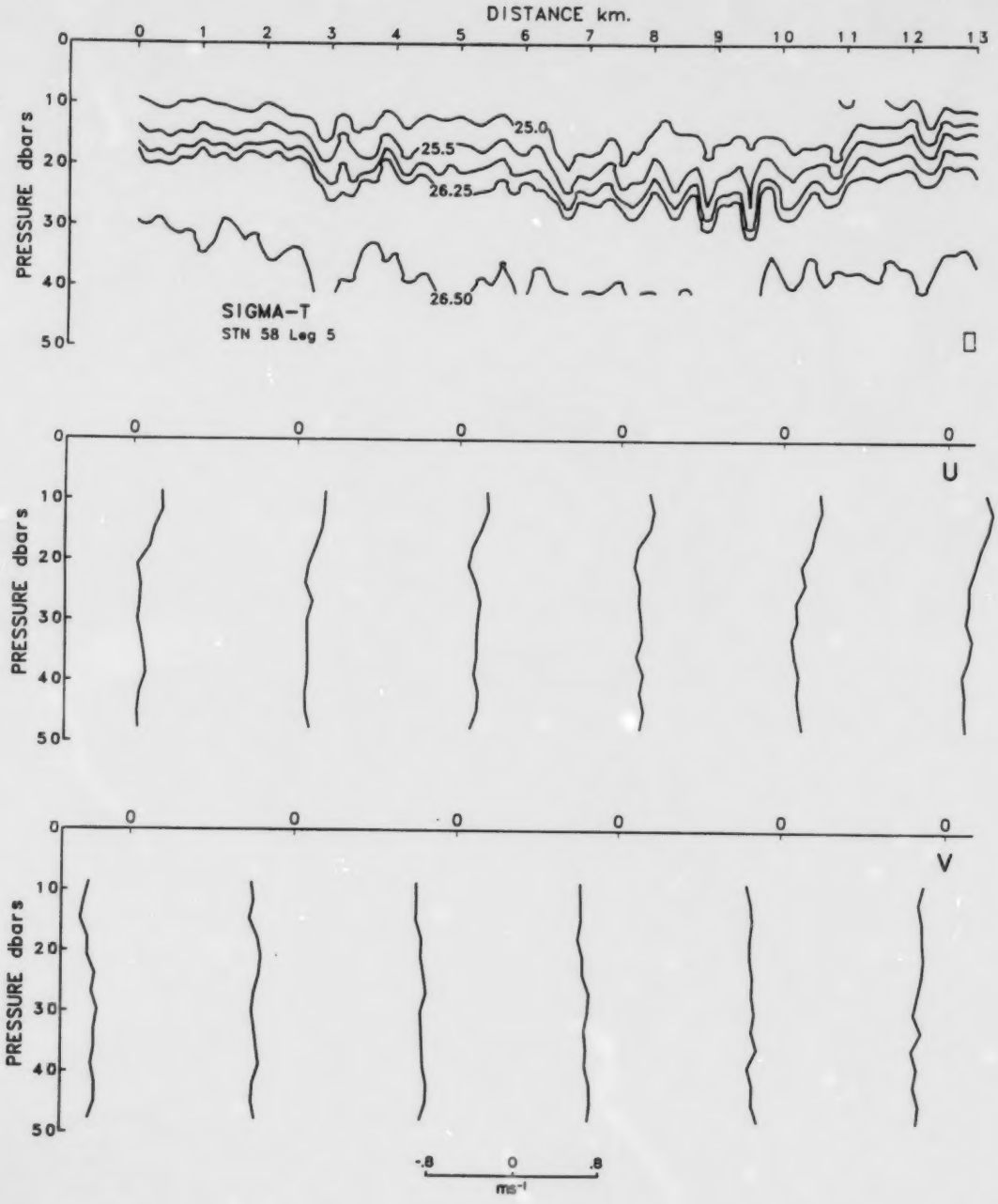

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
25.5
26.25
26.50
SIGMA-T
STN 58 Leg 5
0 0 0 0 0 0
U
V
-.8 0 .8
ms-1

Fig. 310

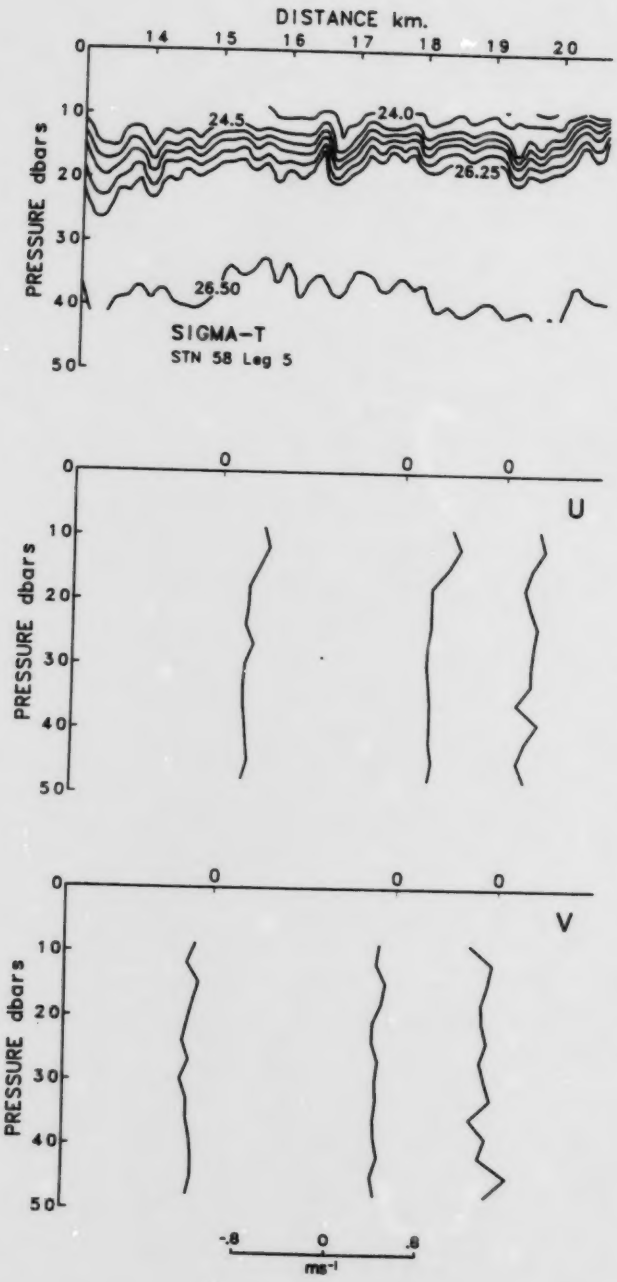

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
24.5
24.0
26.25
26.50
SIGMA-T
STN 58 Leg 5
0
0
0
U
V
-.8
0
.8
ms-1

Fig. 311

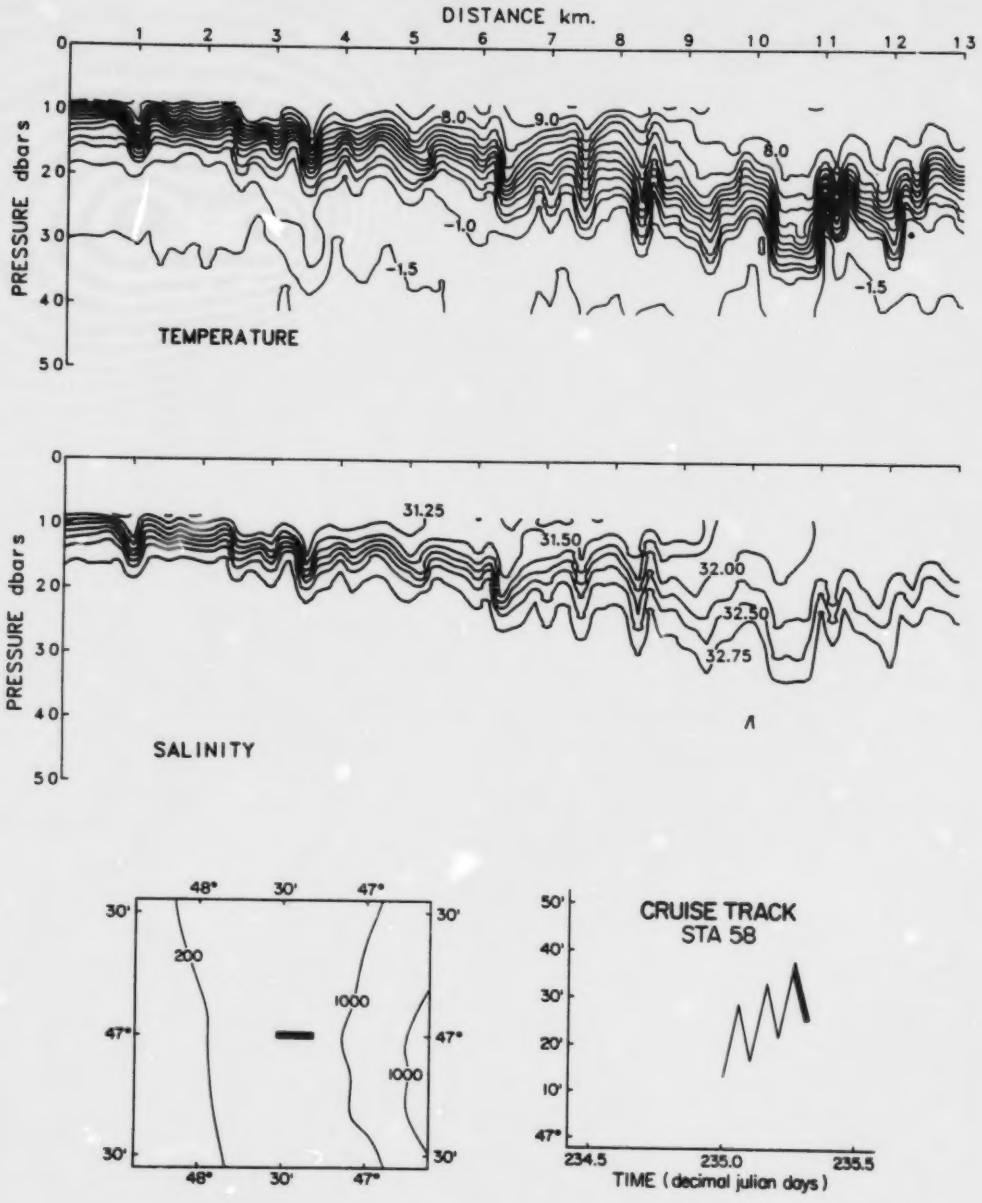

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
8.0
9.0
8.0
-1.0
-1.5
-1.5
TEMPERATURE
0
10 20 30 40 50
PRESSURE dbars
31.25
31.50
32.00
32.50
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 58
50' 40' 30' 20' 10'
47°
234.5 235.0 235.5
TIME (decimal julian days)

Fig. 312

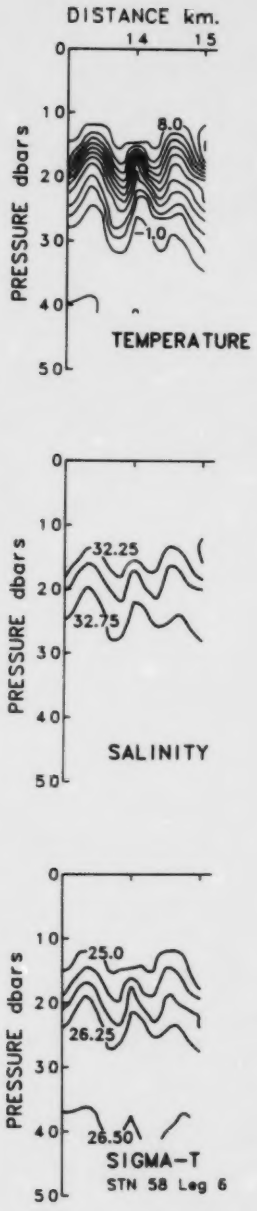

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
1.0
TEMPERATURE
32.25
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 58 Leg 6

Fig. 313

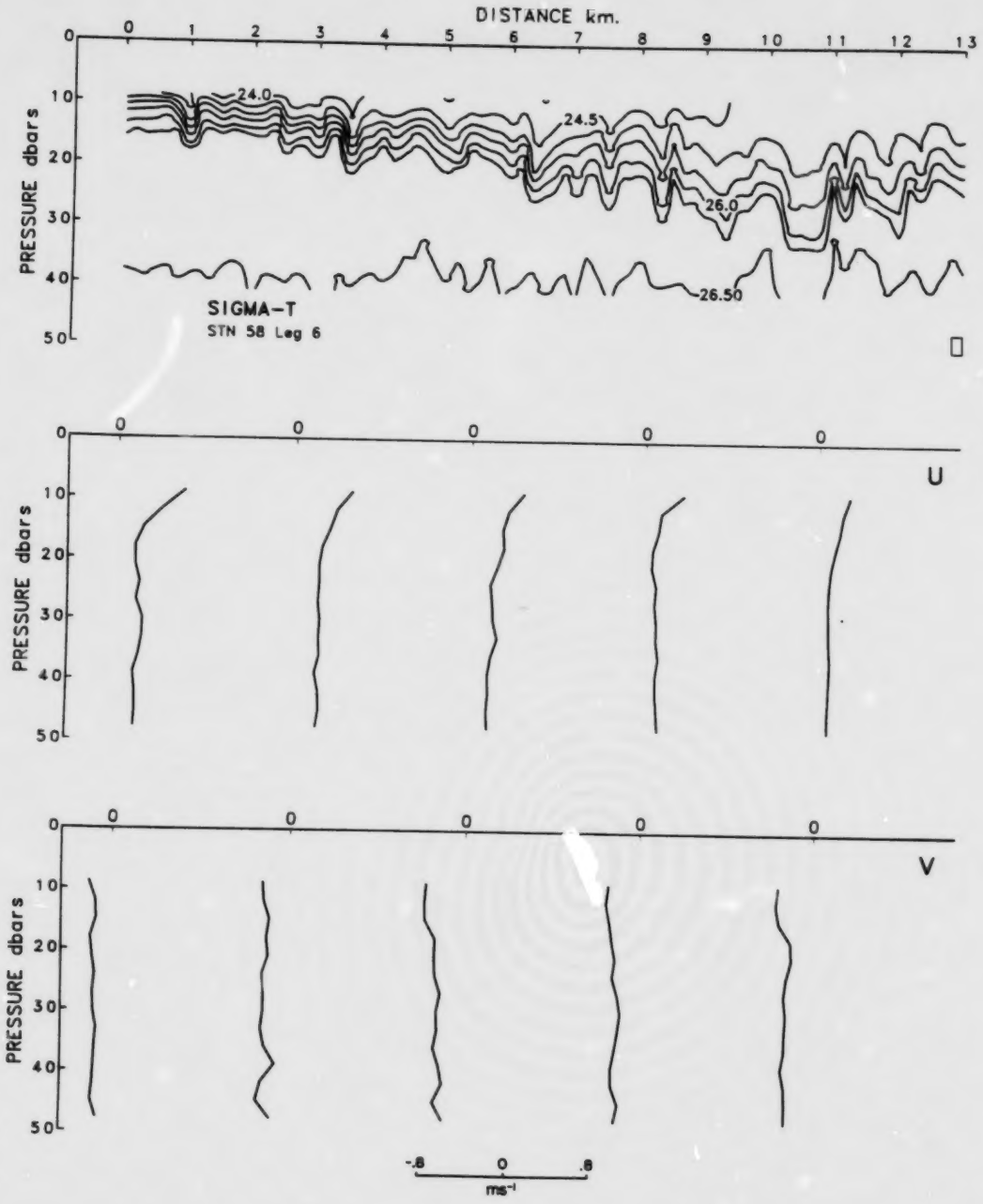
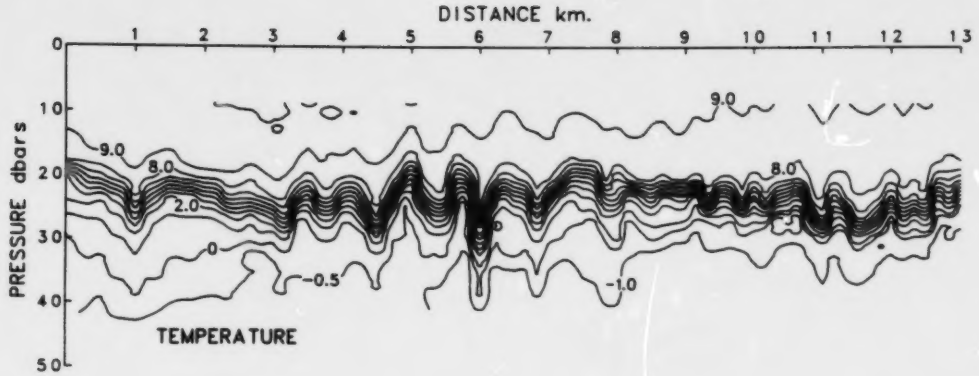
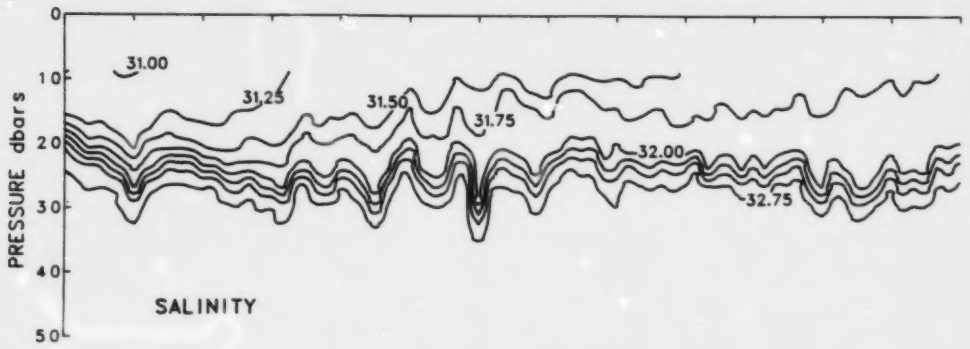

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
26.0
26.50
SIGMA-T
STN 58 Leg 6
0 0 0 0 0
U
0 0 0 0 0
V
-.8 0 .8
ms⁻¹

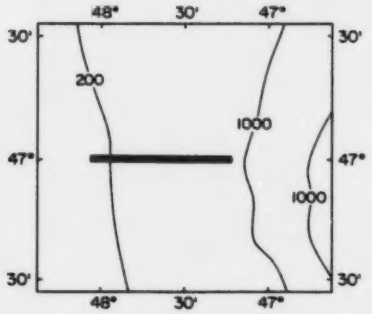
Fig. 314

Figures 315-322

BATFISH station 59; 1 section of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
2.0
0
-0.5
-1.0
TEMPERATURE


0
10
20
30
40
50
PRESSURE dbars
31.00
31.25
31.50
31.75
32.00
32.75
SALINITY


48°
30'
47°
30'
200
1000
1000

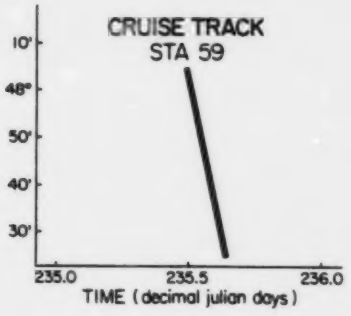

CRUISE TRACK
STA 59
10'
48°
50'
40'
30'
235.0
235.5
236.0
TIME (decimal julian days)

Fig. 315

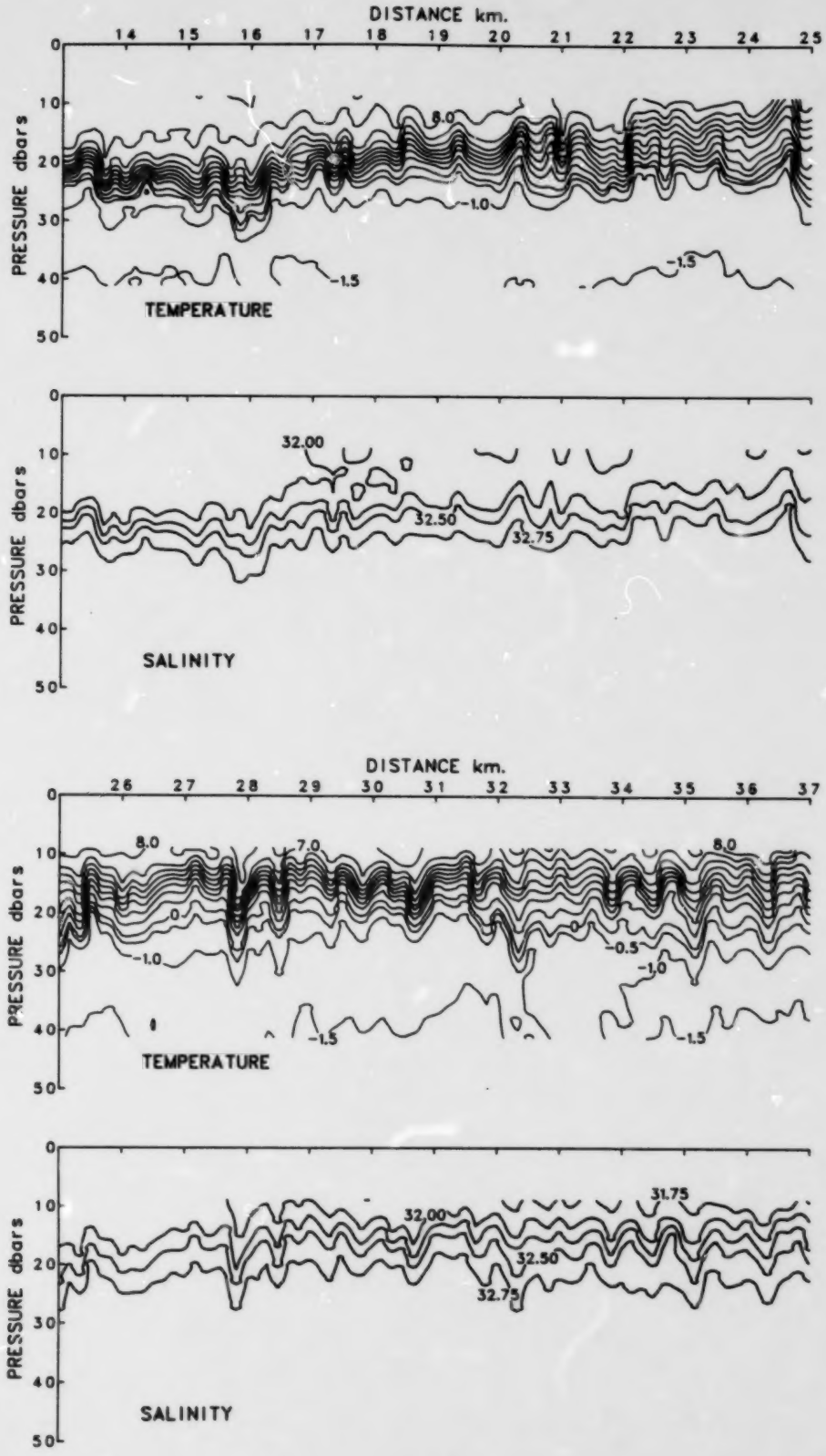

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
8.0
-1.0
-1.5
-1.5
TEMPERATURE
32.00
32.50
32.75
SALINITY
DISTANCE km.
26 27 28 29 30 31 32 33 34 35 36 37
8.0
7.0
8.0
0
0
-1.0
-0.5
-1.0
-1.5
-1.5
TEMPERATURE
31.75
32.00
32.50
32.75
SALINITY

Fig. 316

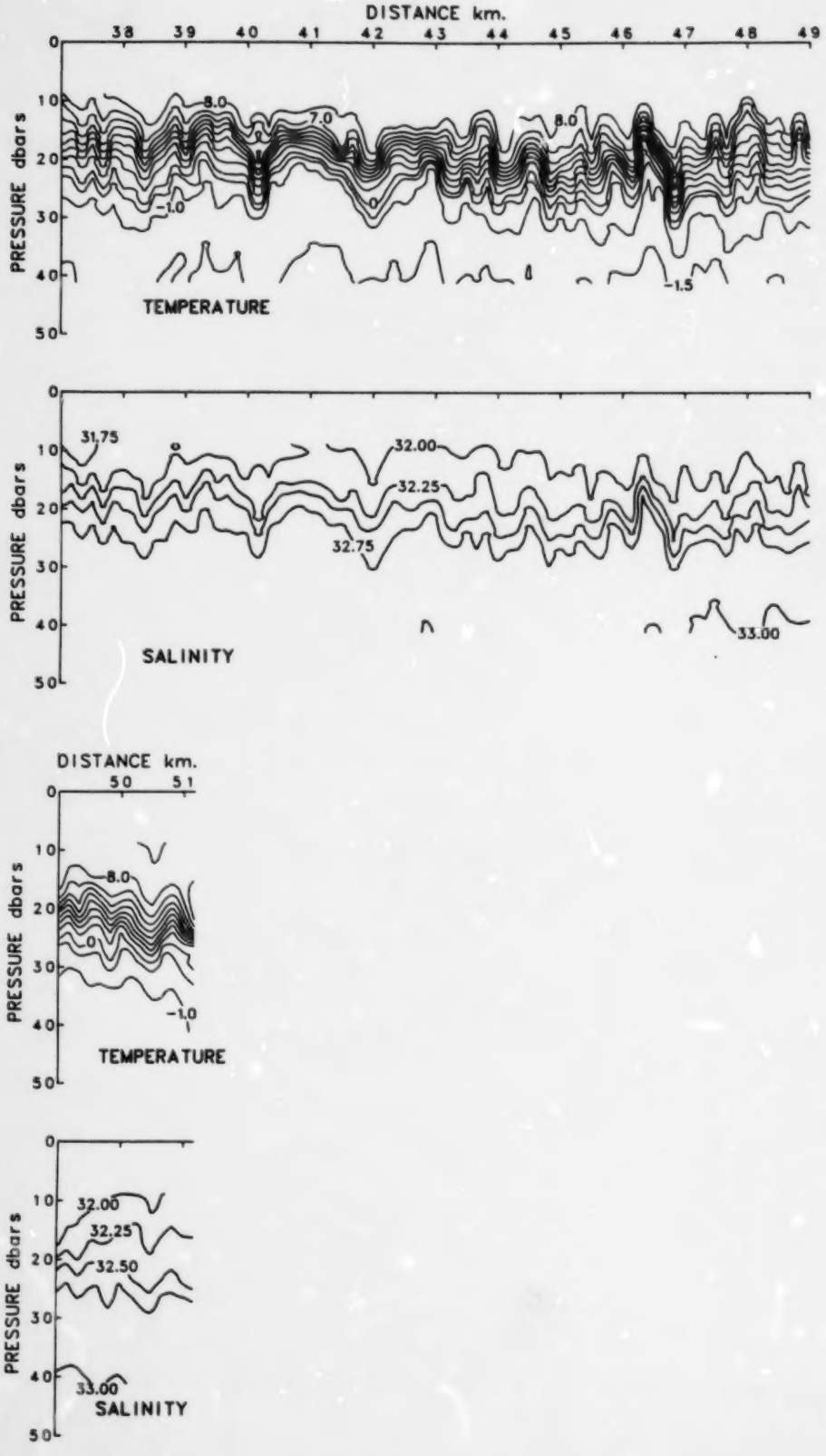

DISTANCE km.
38 39 40 41 42 43 44 45 46 47 48 49
PRESSURE dbars
8.0
7.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.25
32.75
33.00
SALINITY
DISTANCE km.
50 51
8.0
0
-1.0
TEMPERATURE
32.00
32.25
32.50
33.00
SALINITY

Fig. 317

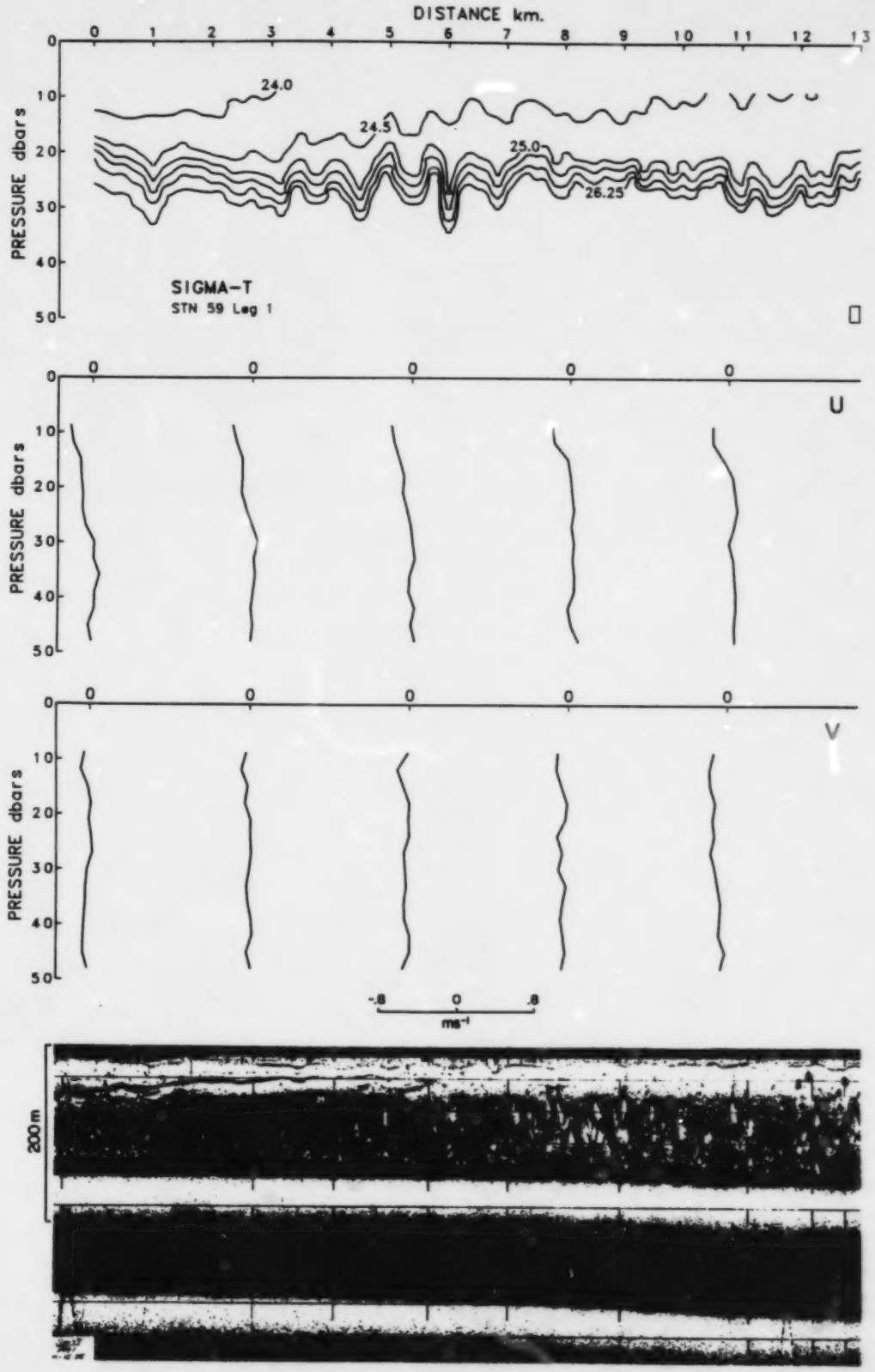

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.0
24.5
25.0
26.25
SIGMA-T
STN 59 Leg 1
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 318

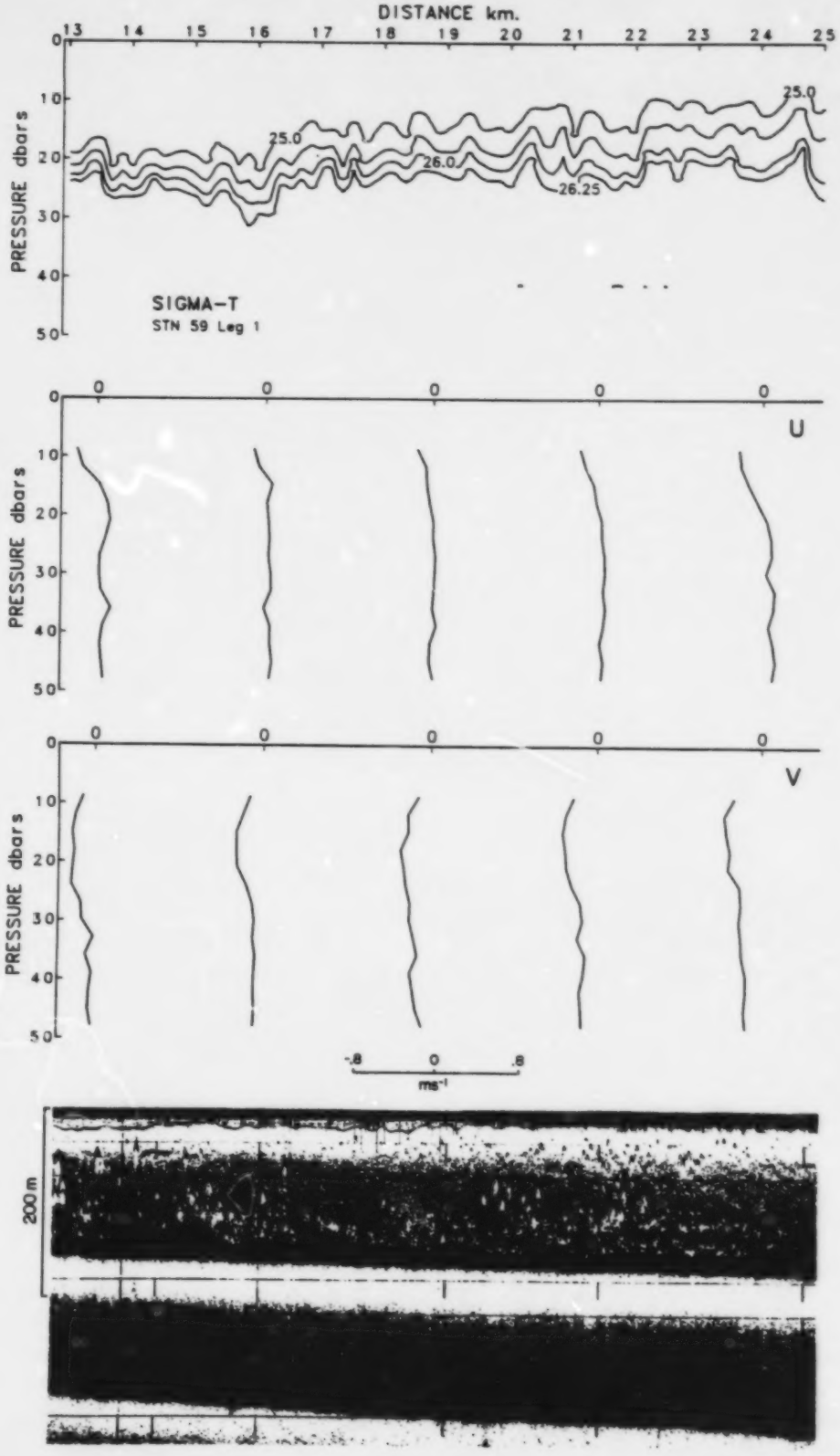

DISTANCE km.
13 14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
25.0
25.0
26.0
26.25
SIGMA-T
STN 59 Leg 1
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹
200 m

Fig. 319

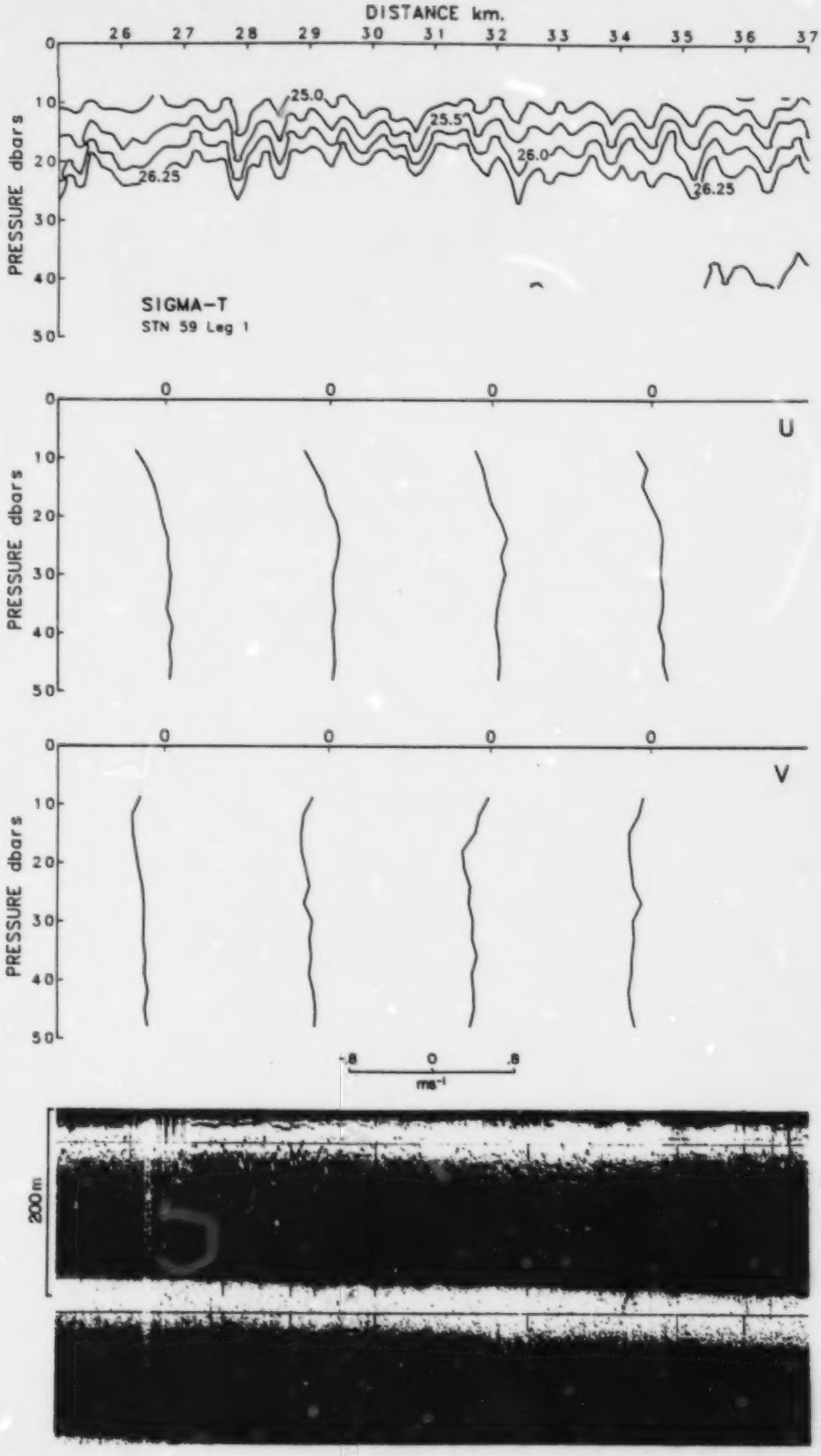

DISTANCE km.
26 27 28 29 30 31 32 33 34 35 36 37
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.25
SIGMA-T
STN 59 Leg 1
U
V
0 0 0 0
-.8 0 .8
ms⁻¹
200m

Fig. 320

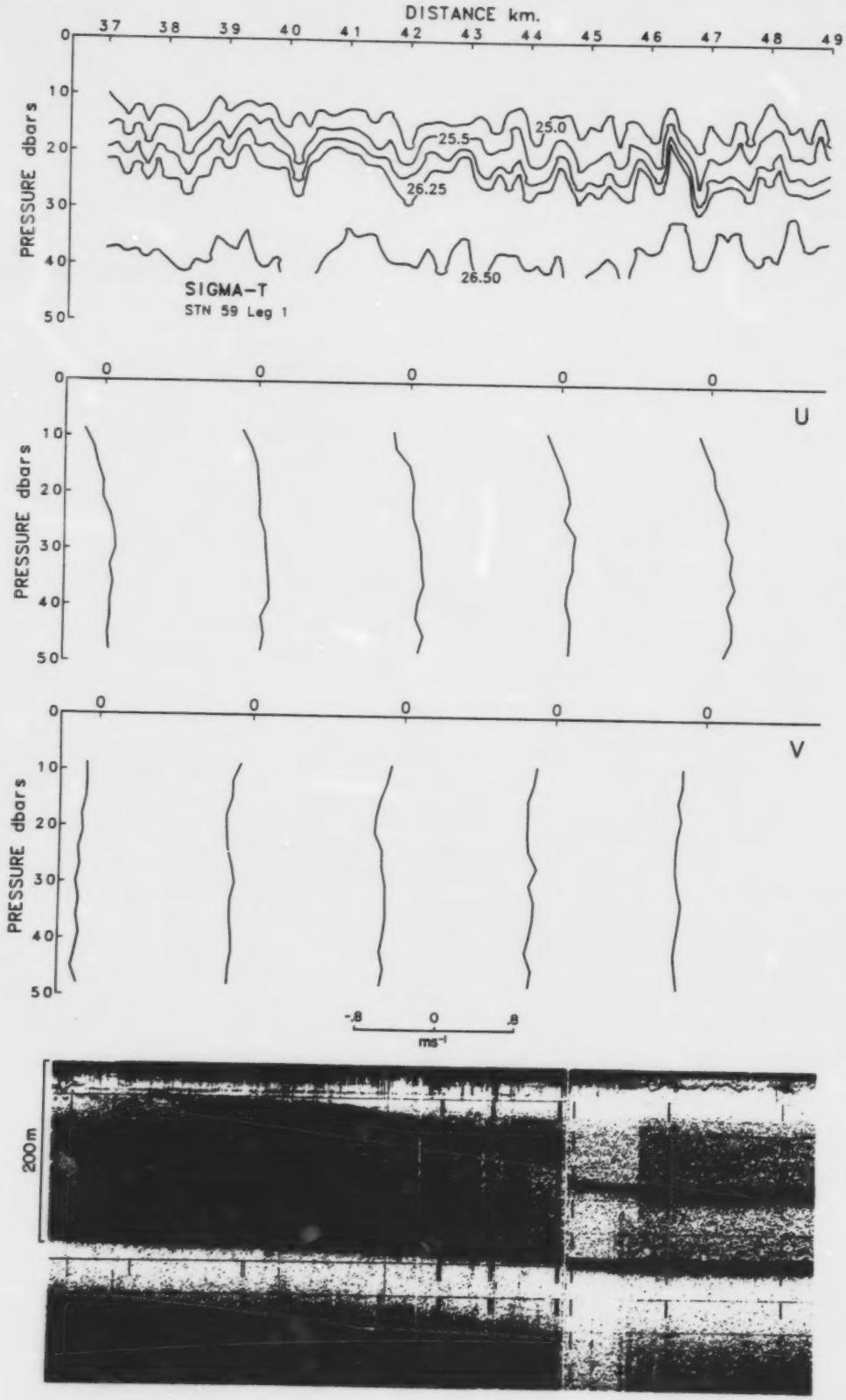

DISTANCE km.
37 38 39 40 41 42 43 44 45 46 47 48 49
PRESSURE dbars
0 10 20 30 40 50
25.5
25.0
26.25
26.50
SIGMA-T
STN 59 Leg 1
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 321

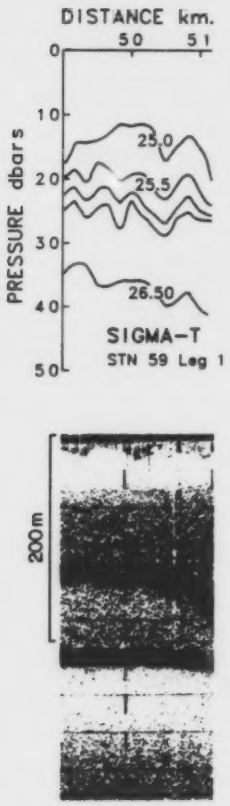

DISTANCE km.
50
51
0
10
20
30
40
50
PRESSURE dbars
25.0
25.5
26.50
SIGMA-T
STN 59 Leg 1
200m

Fig. 322

Figures 323-376

BATFISH station 60; 15 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and longitude vs. time plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

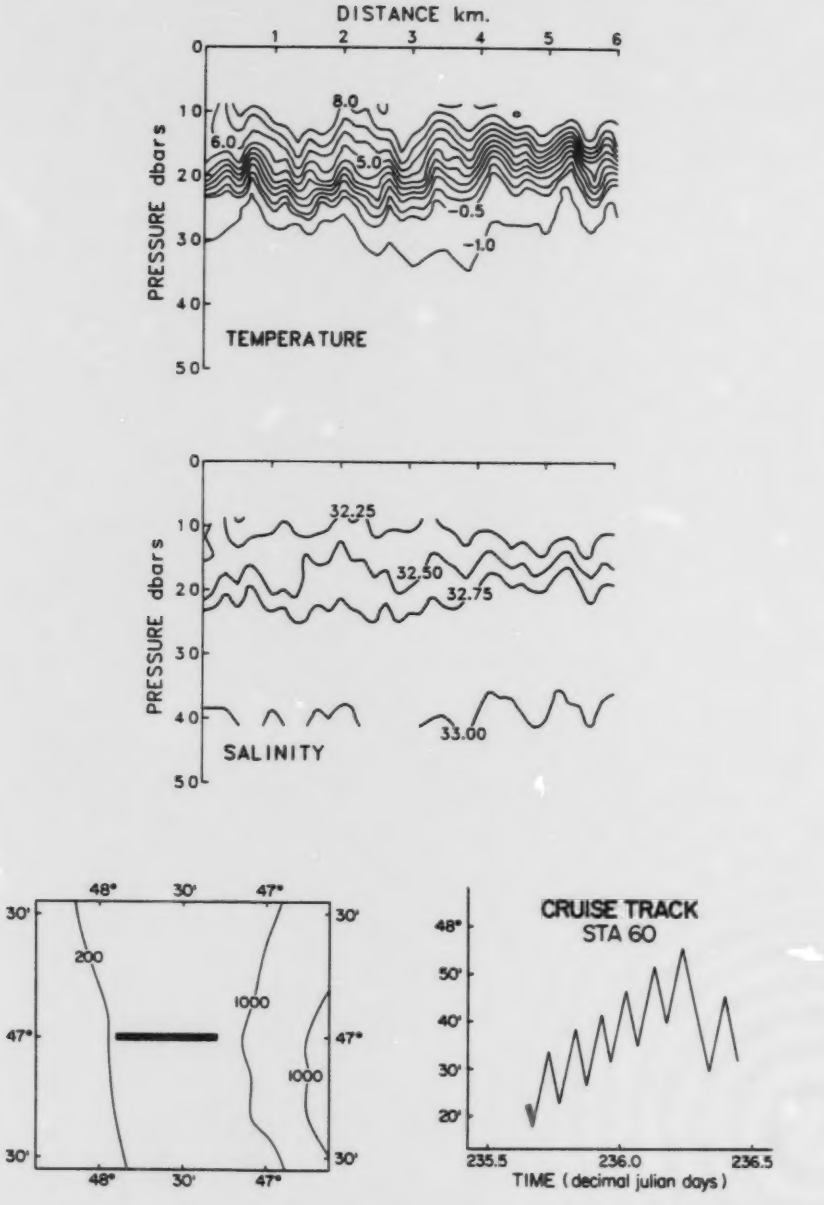

DISTANCE km.
0
1
2
3
4
5
6
PRESSURE dbars
10
20
30
40
50
8.0
6.0
5.0
-0.5
-1.0
TEMPERATURE
32.25
32.50
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
48°
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 323

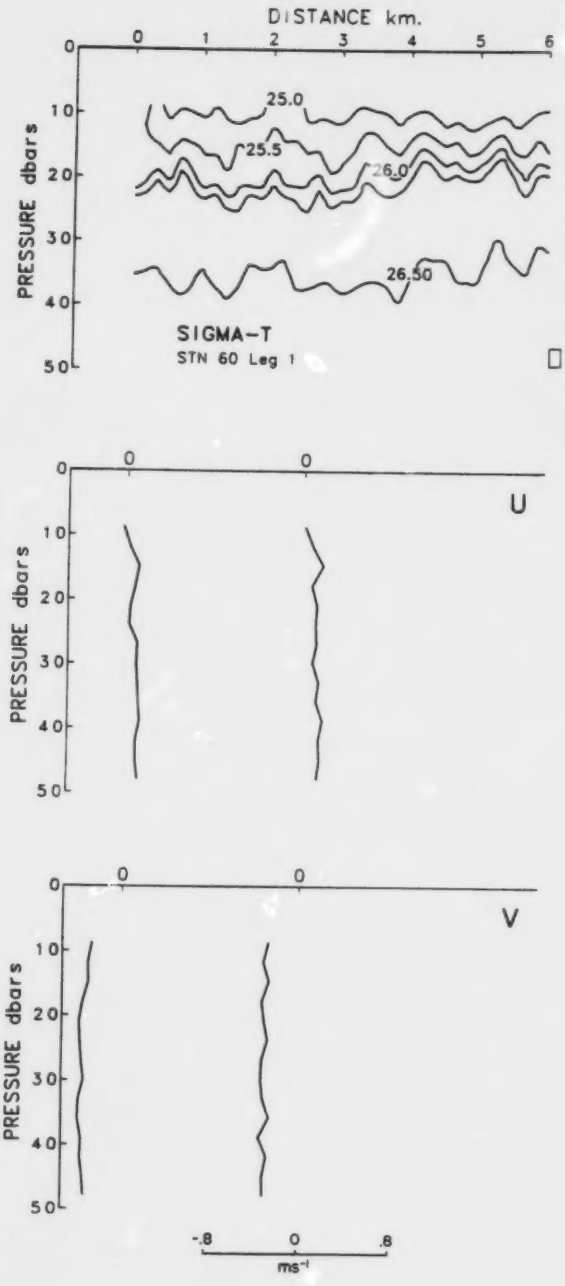
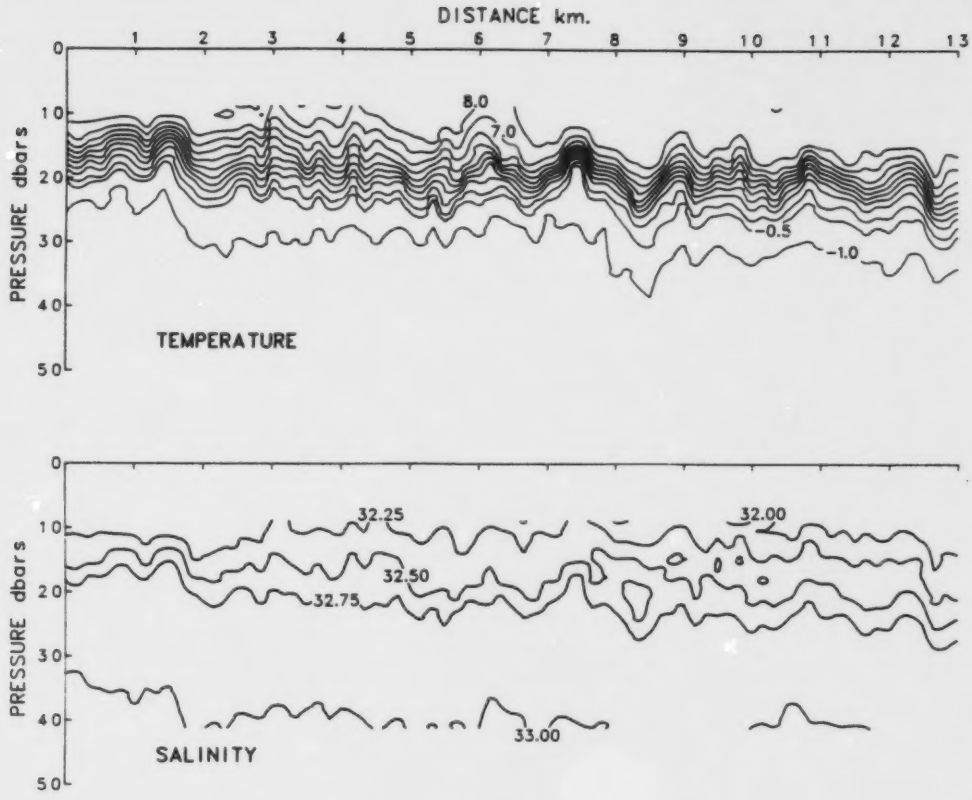
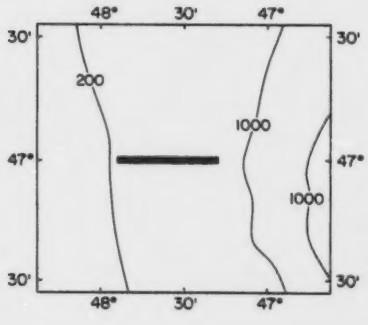

DISTANCE km.
0
1
2
3
4
5
6
PRESSURE dbars
10
20
30
40
50
25.0
25.5
26.0
26.50
SIGMA-T
STN 60 Leg 1
U
V
-.8
.8
ms⁻¹

Fig. 324


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
7.0
-0.5
-1.0
TEMPERATURE
32.25
32.00
32.50
32.75
33.00
SALINITY


48°
30'
47°
200
1000
1000

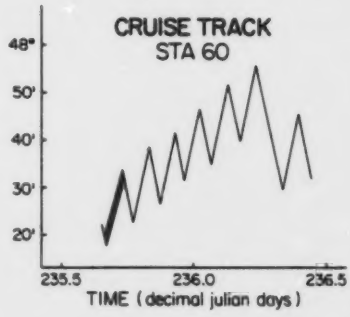

CRUISE TRACK
STA 60
48°
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 325

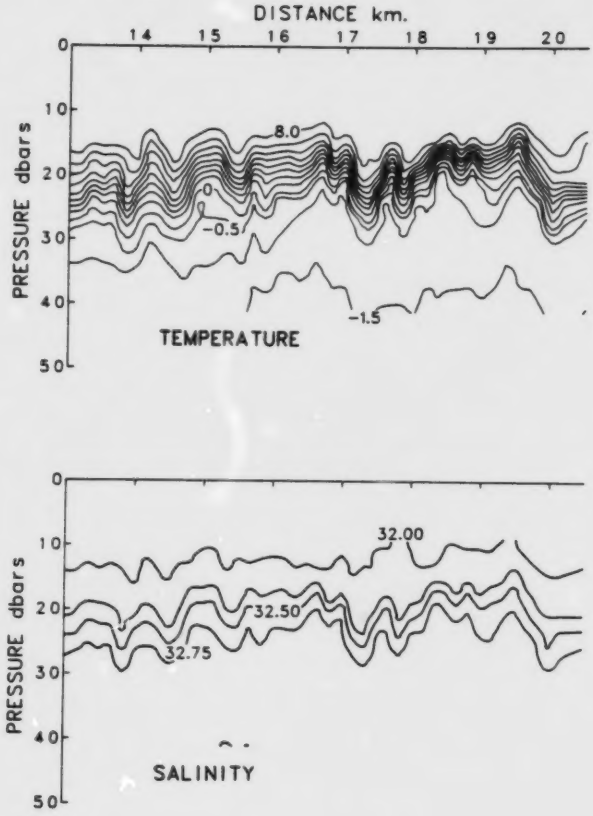

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
8.0
0
-0.5
-1.5
TEMPERATURE
32.00
32.50
32.75
SALINITY

Fig. 326

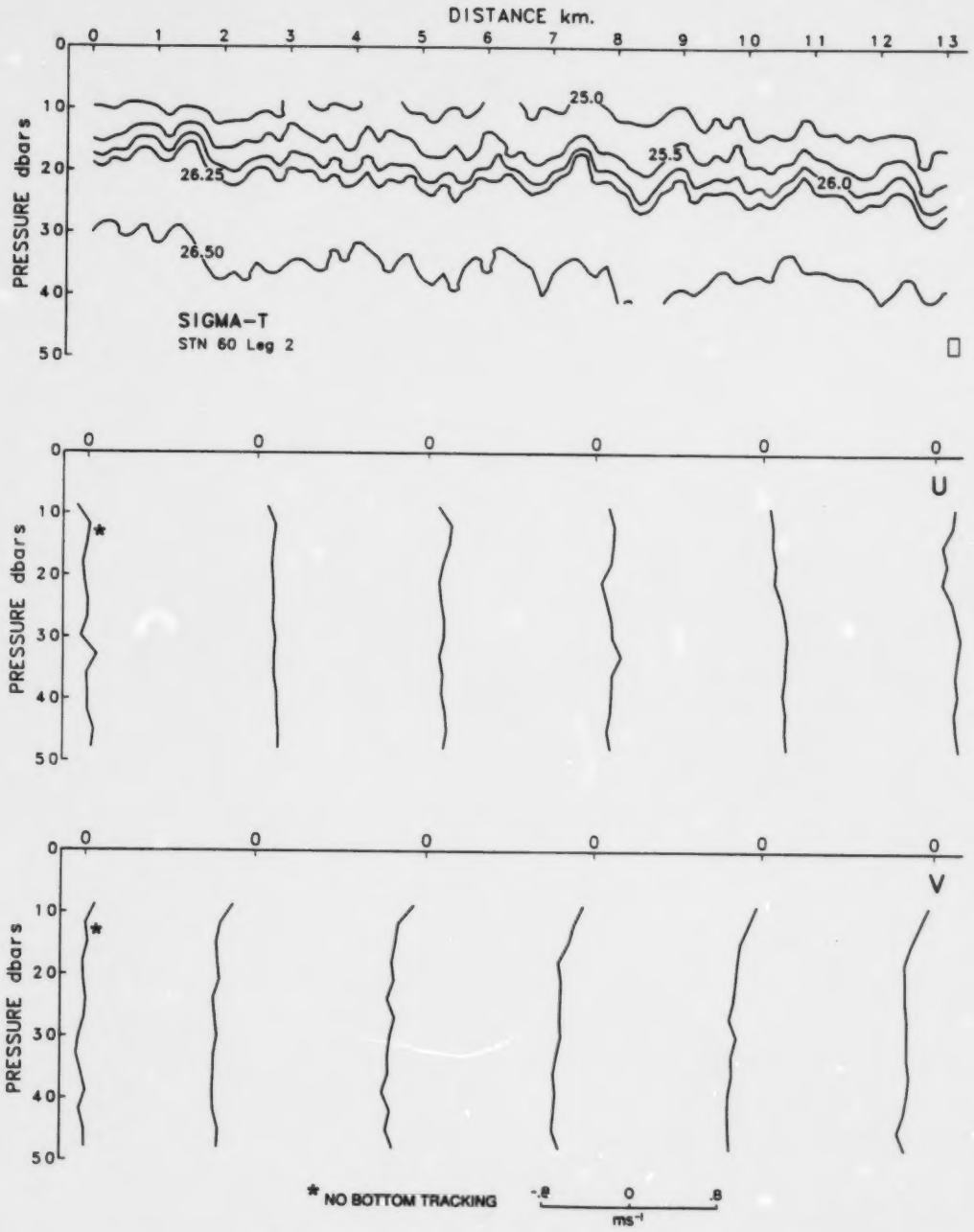

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 2
U
V
0 0 0 0 0 0
*
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 327

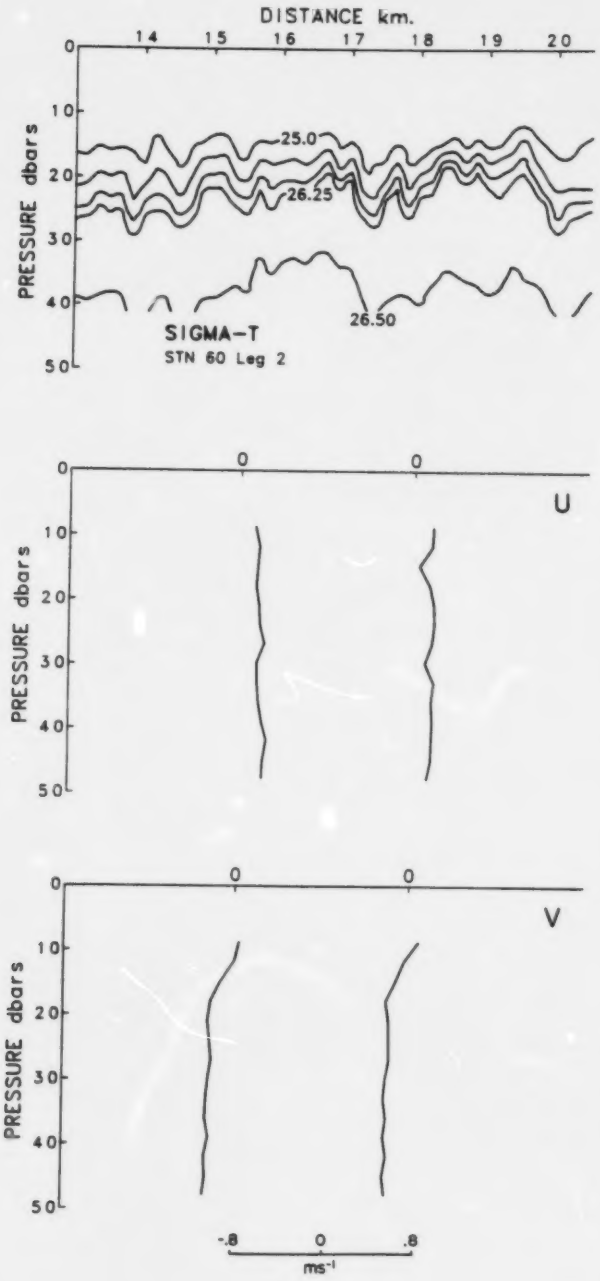

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 60 Leg 2
0
0
U
0
0
V
-.8
0
.8
ms⁻¹

Fig. 328

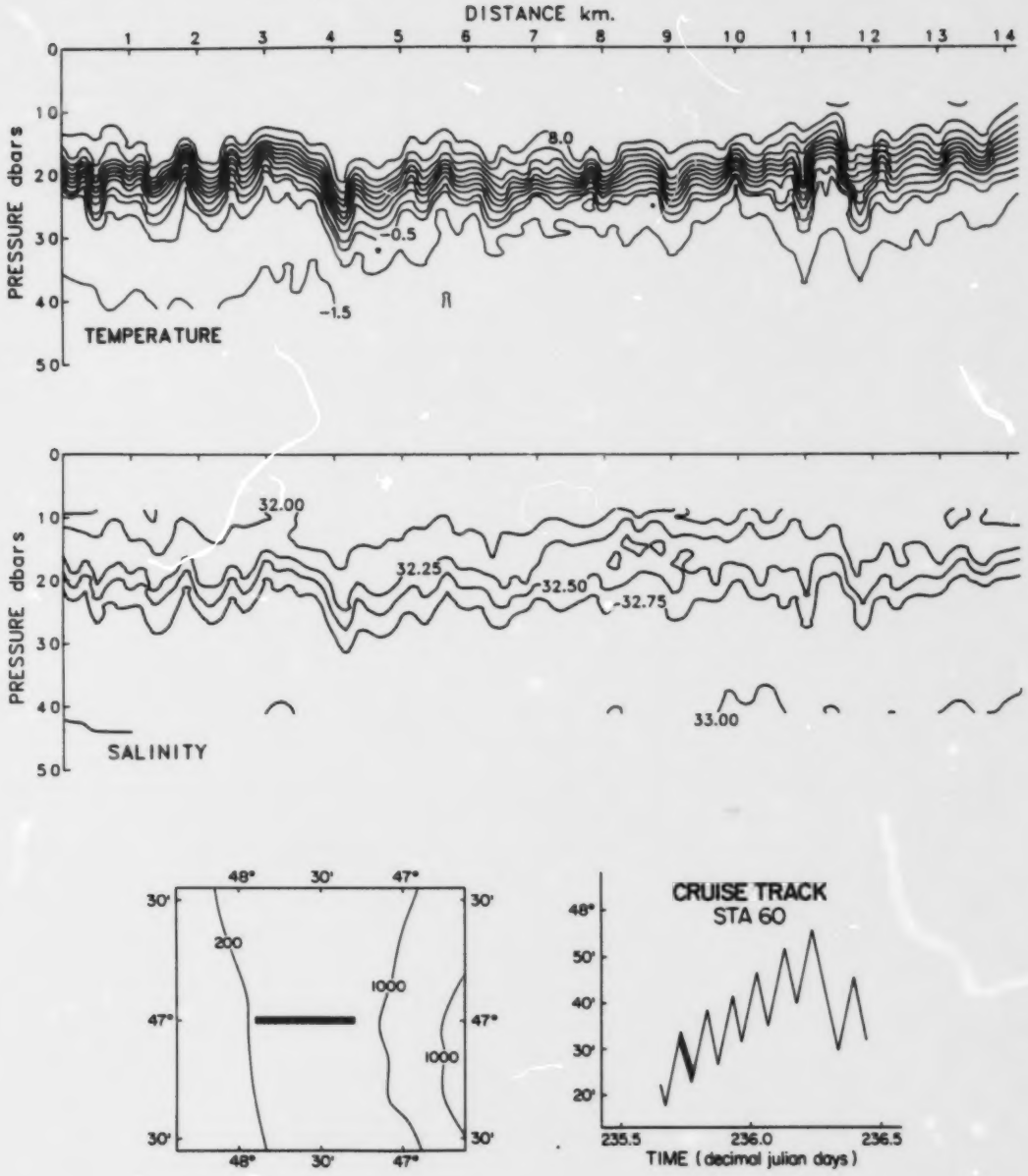

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13 14
PRESSURE dbars
0 10 20 30 40 50
8.0
-0.5
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
33.00
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
48° 50' 40' 30' 20'
235.5 236.0 236.5
TIME (decimal julian days)

Fig. 329

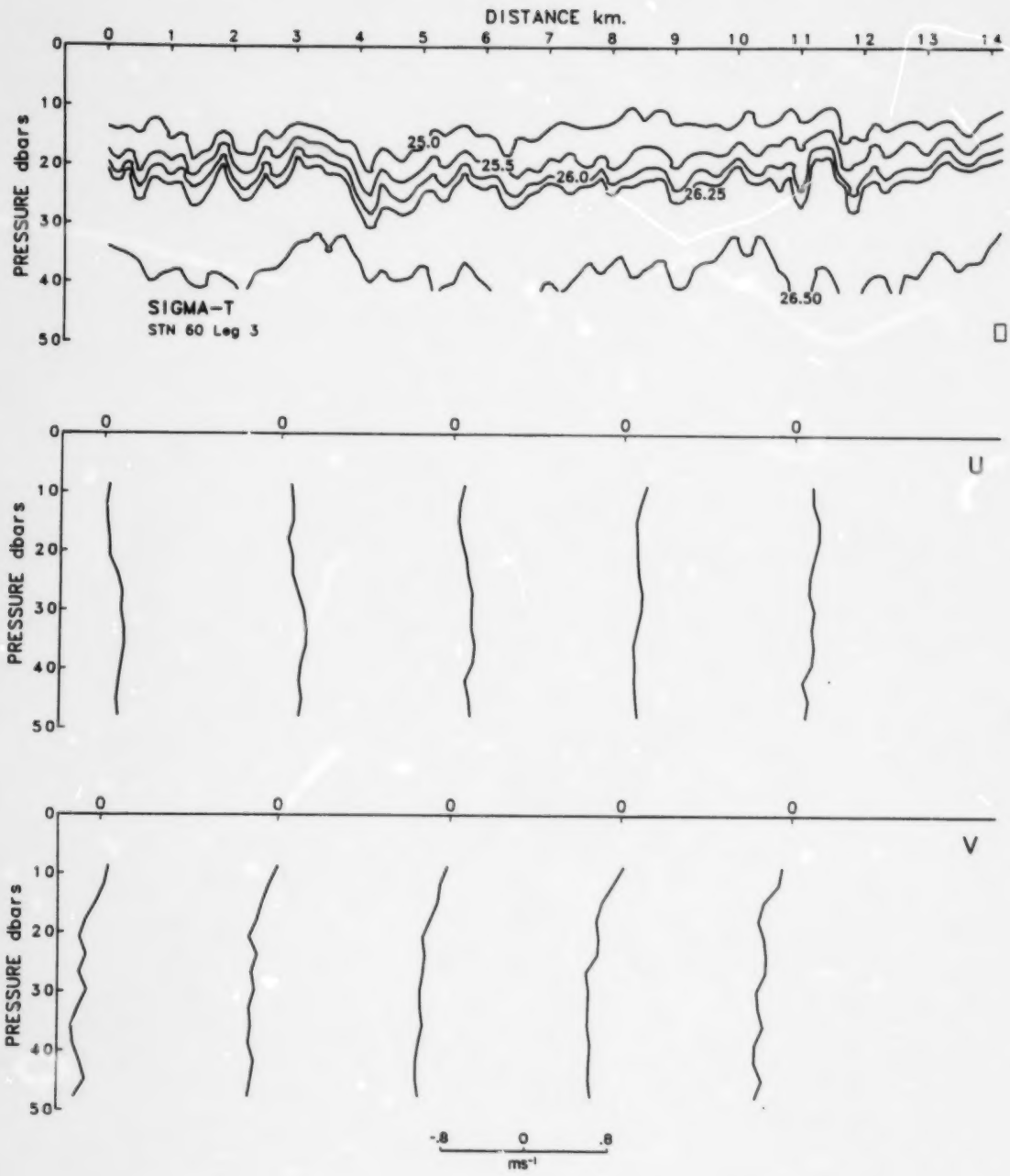
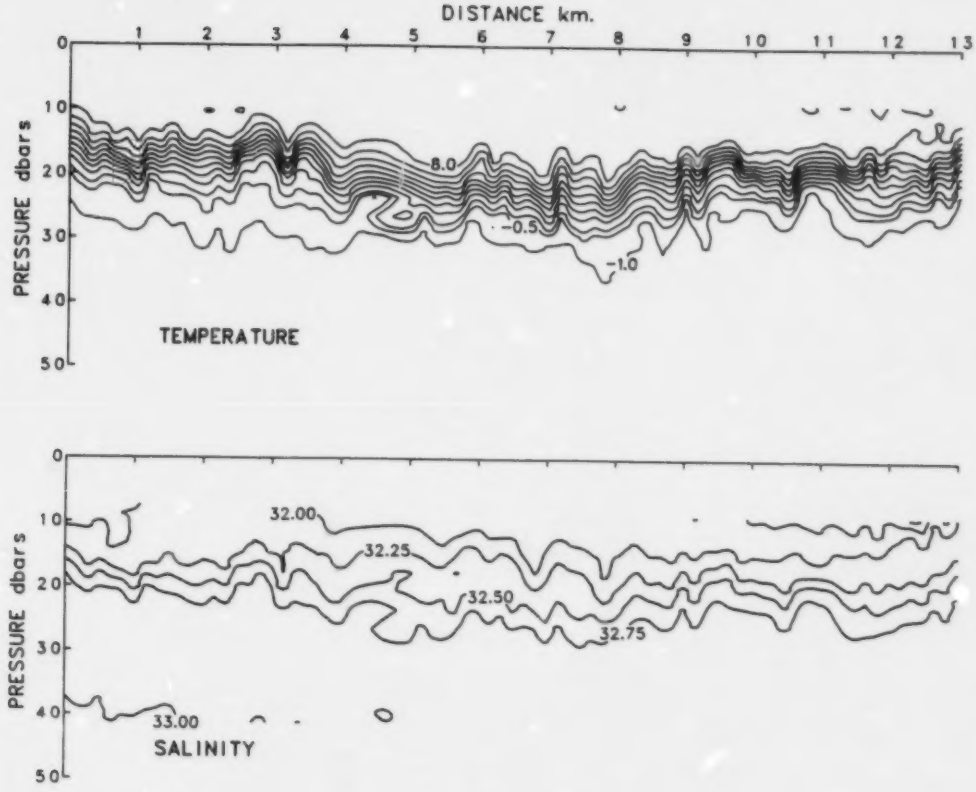

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 3
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 330


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0
10
20
30
40
50
8.0
-0.5
-1.0
TEMPERATURE
32.00
32.25
32.50
32.75
33.00
SALINITY

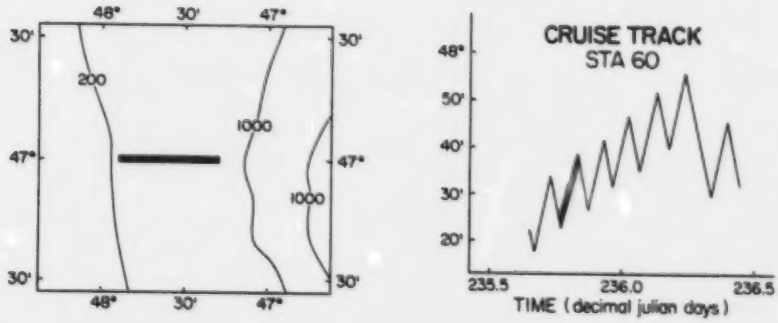

48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 331

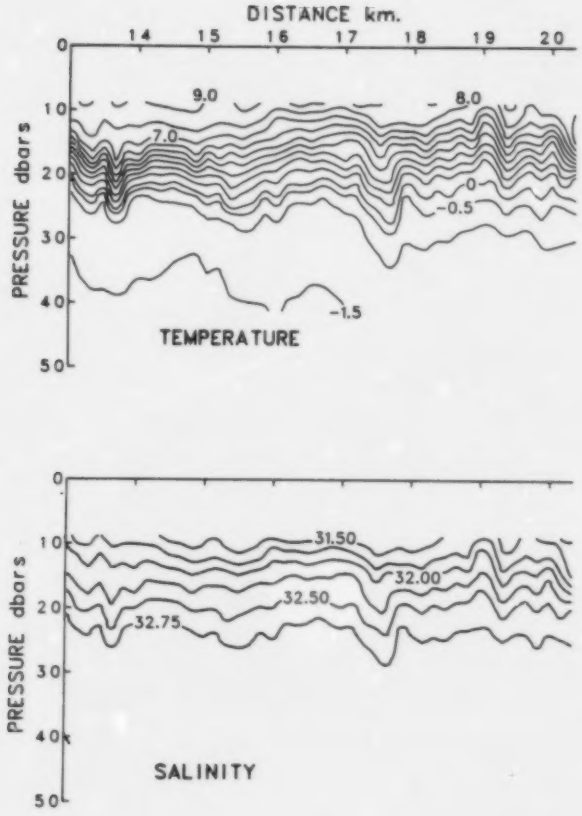

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
7.0
0
-0.5
-1.5
TEMPERATURE
31.50
32.00
32.50
32.75
SALINITY

Fig. 332

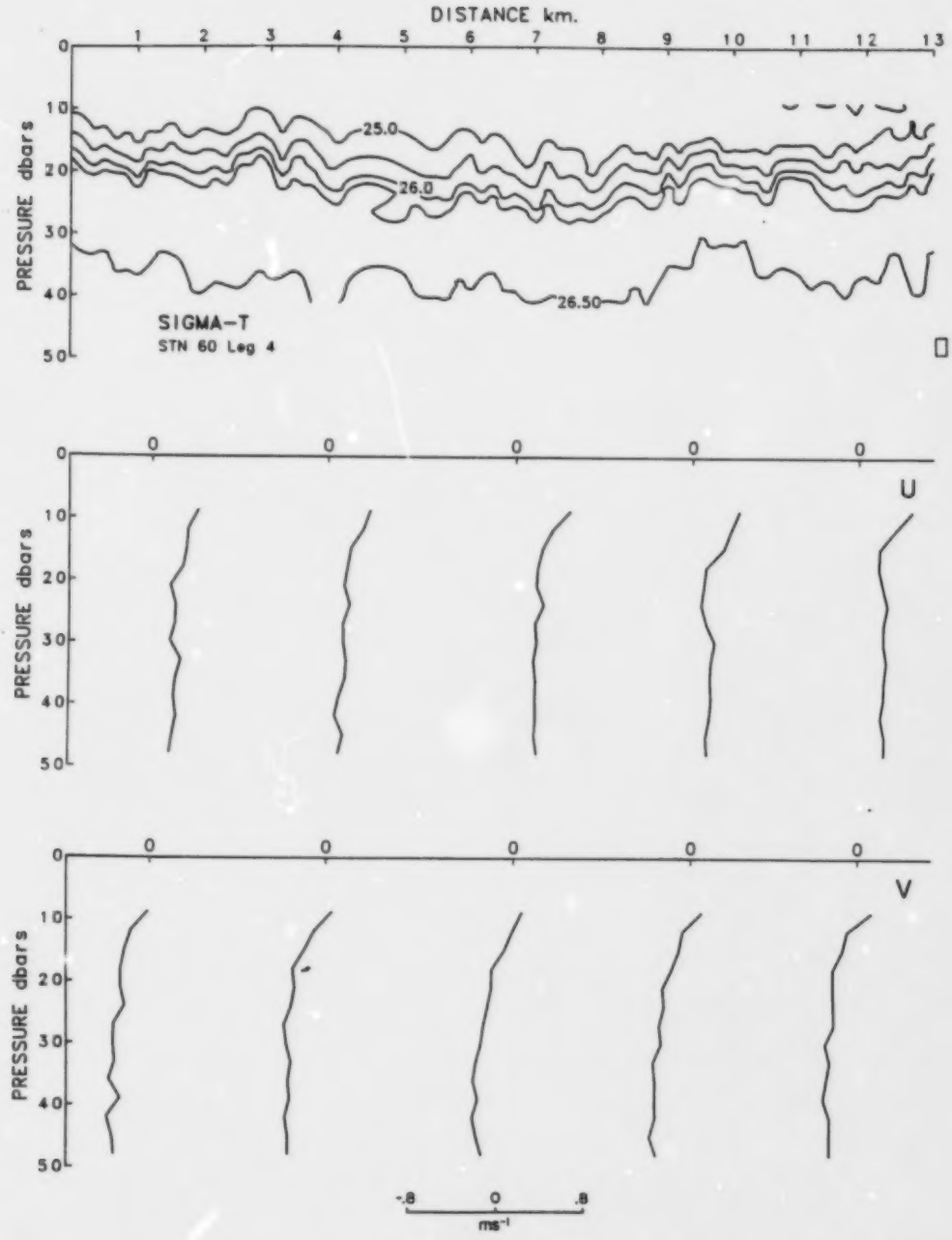

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
25.0
26.0
26.50
SIGMA-T
STN 60 Leg 4
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 333

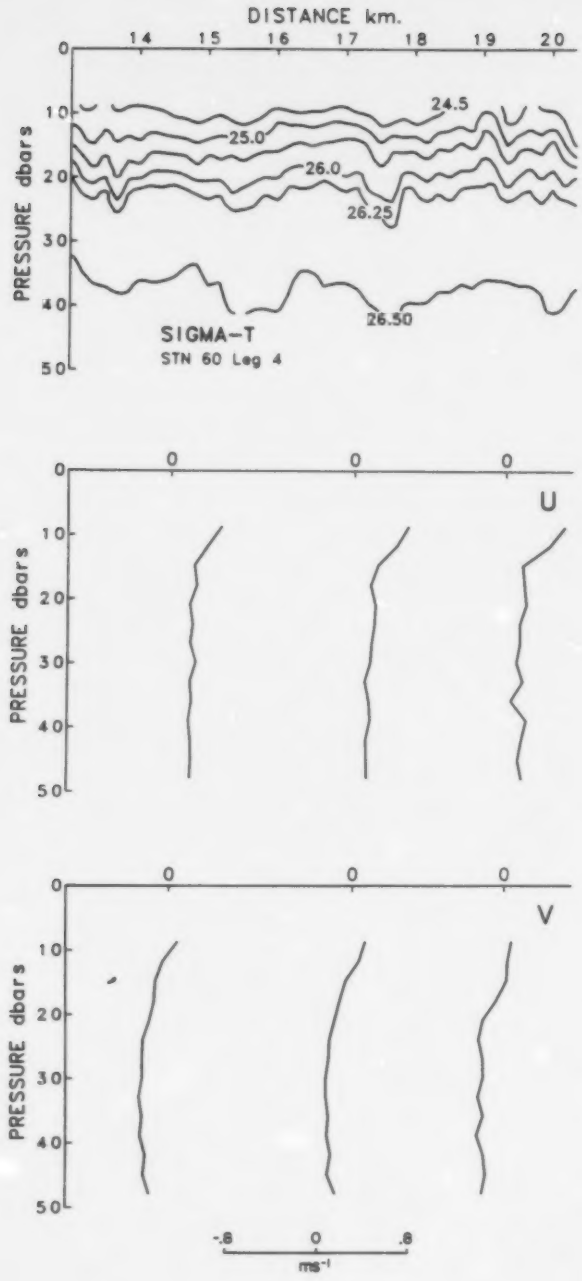

DISTANCE km.
14
15
16
17
18
19
20
PRESSURE dbars
24.5
25.0
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 4
U
V
0
10
20
30
40
50
-.8
.8
ms⁻¹

Fig. 334

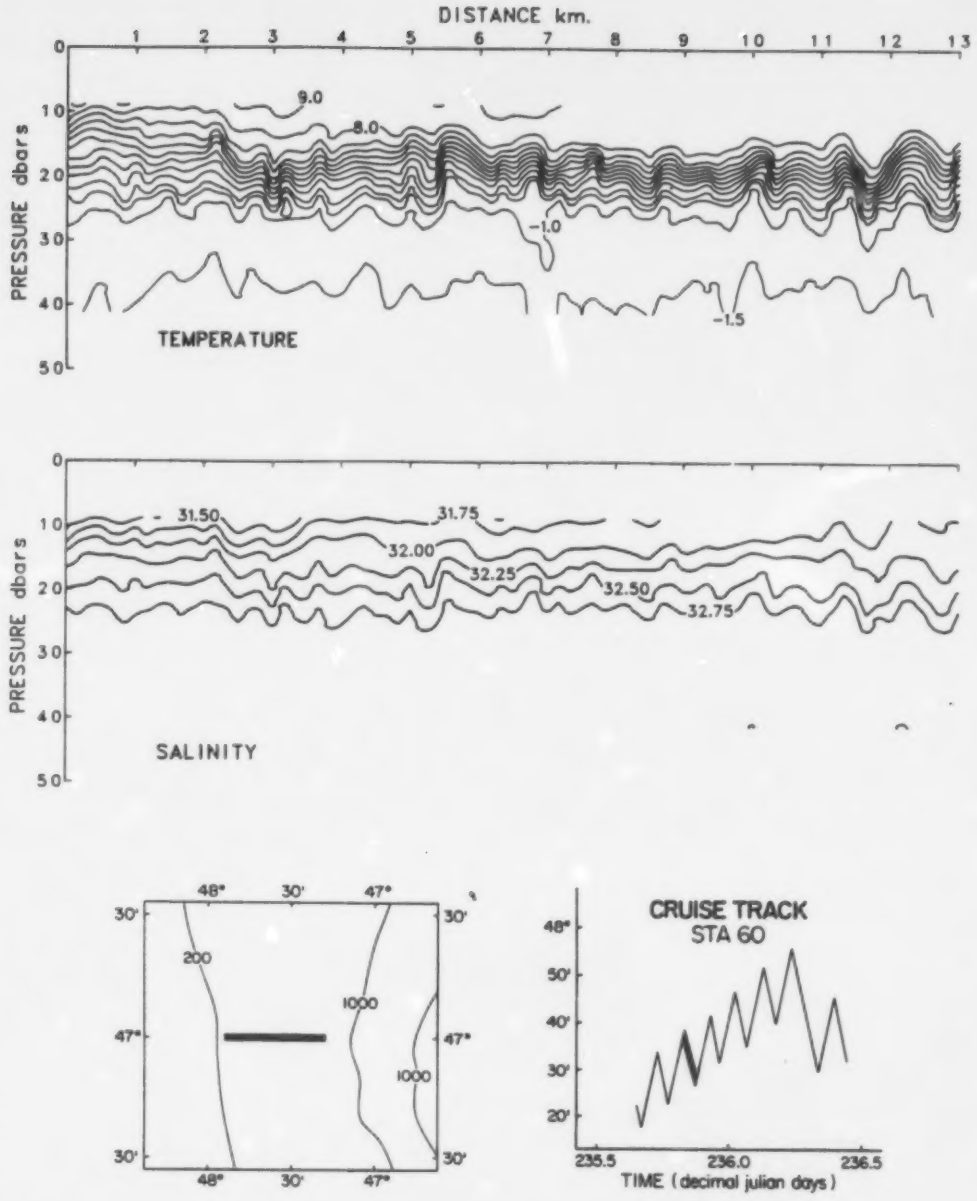

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.50
31.75
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
50'
40'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 335

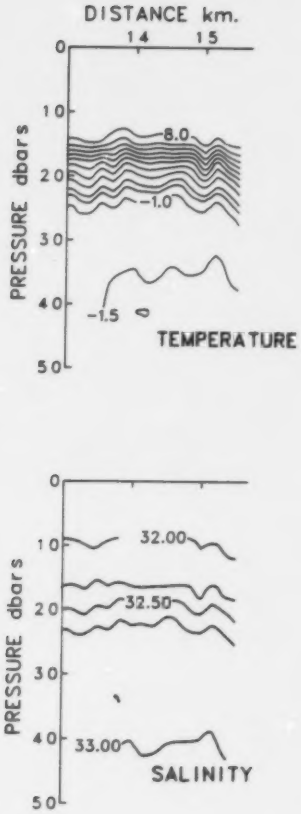

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
0
TEMPERATURE
32.00
32.50
33.00
SALINITY

Fig. 336

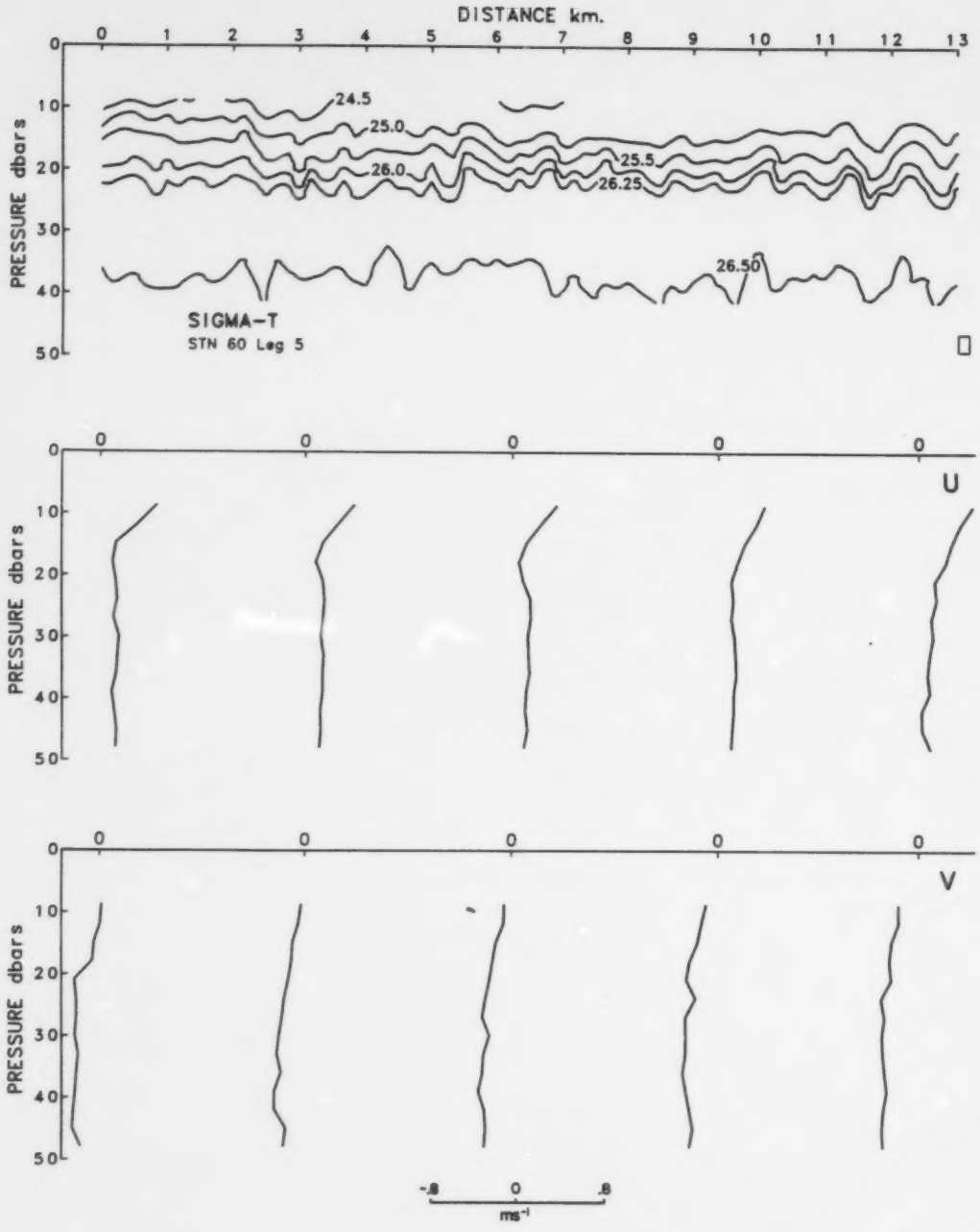

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.0
25.5
26.25
26.50
SIGMA-T
STN 60 Leg 5
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 337

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 60 Leg 5
0
U
V
-.8
.8
ms⁻¹

Fig. 338

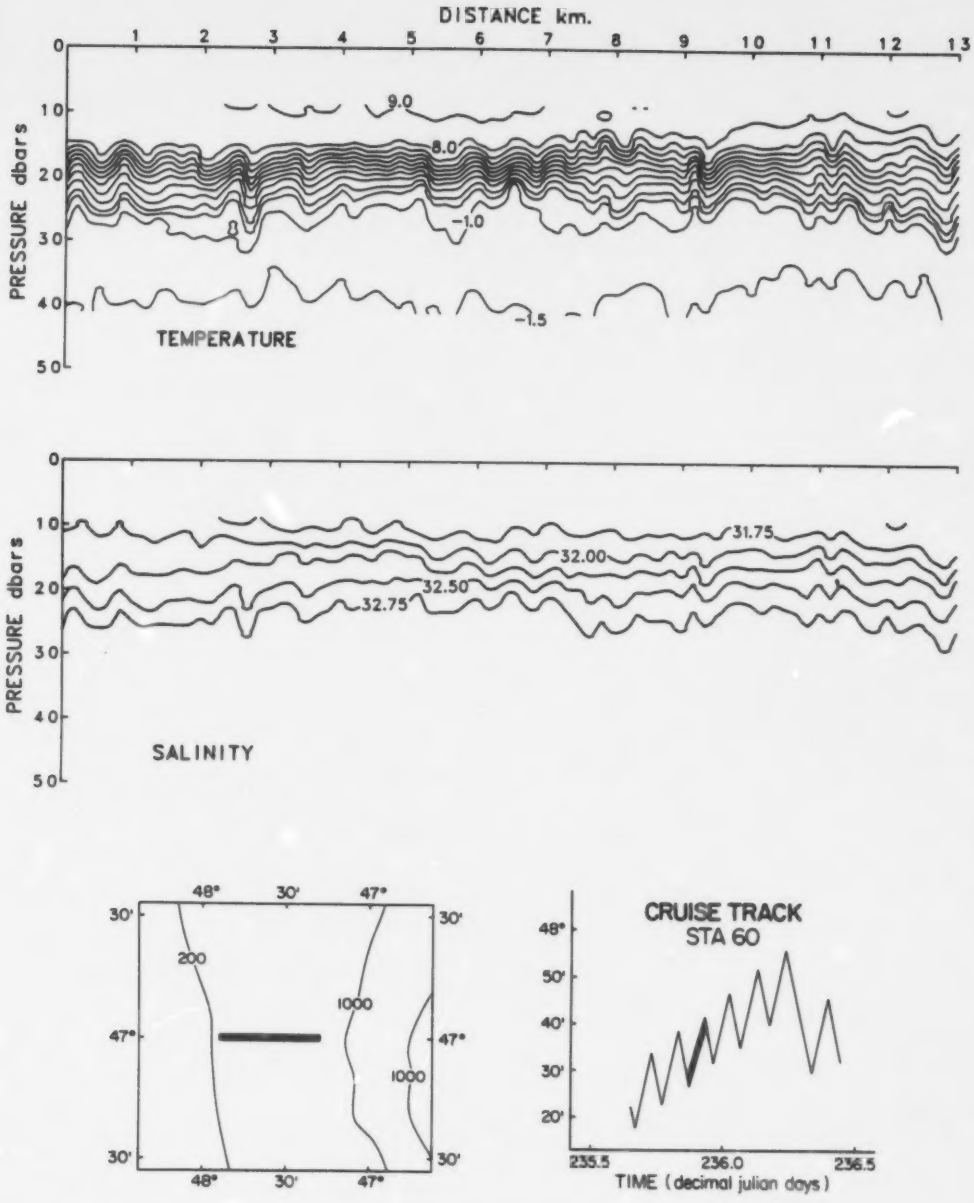

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.50
32.75
SALINITY
48° 30' 47°
200
1000
1000
CRUISE TRACK
STA 60
235.5 236.0 236.5
TIME (decimal julian days)

Fig. 339

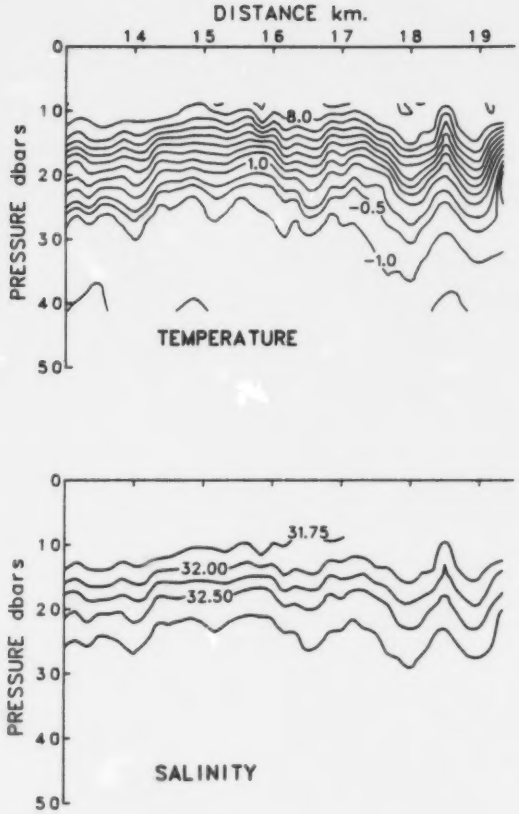

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
8.0
1.0
-0.5
-1.0
TEMPERATURE
31.75
32.00
32.50
SALINITY

Fig. 340

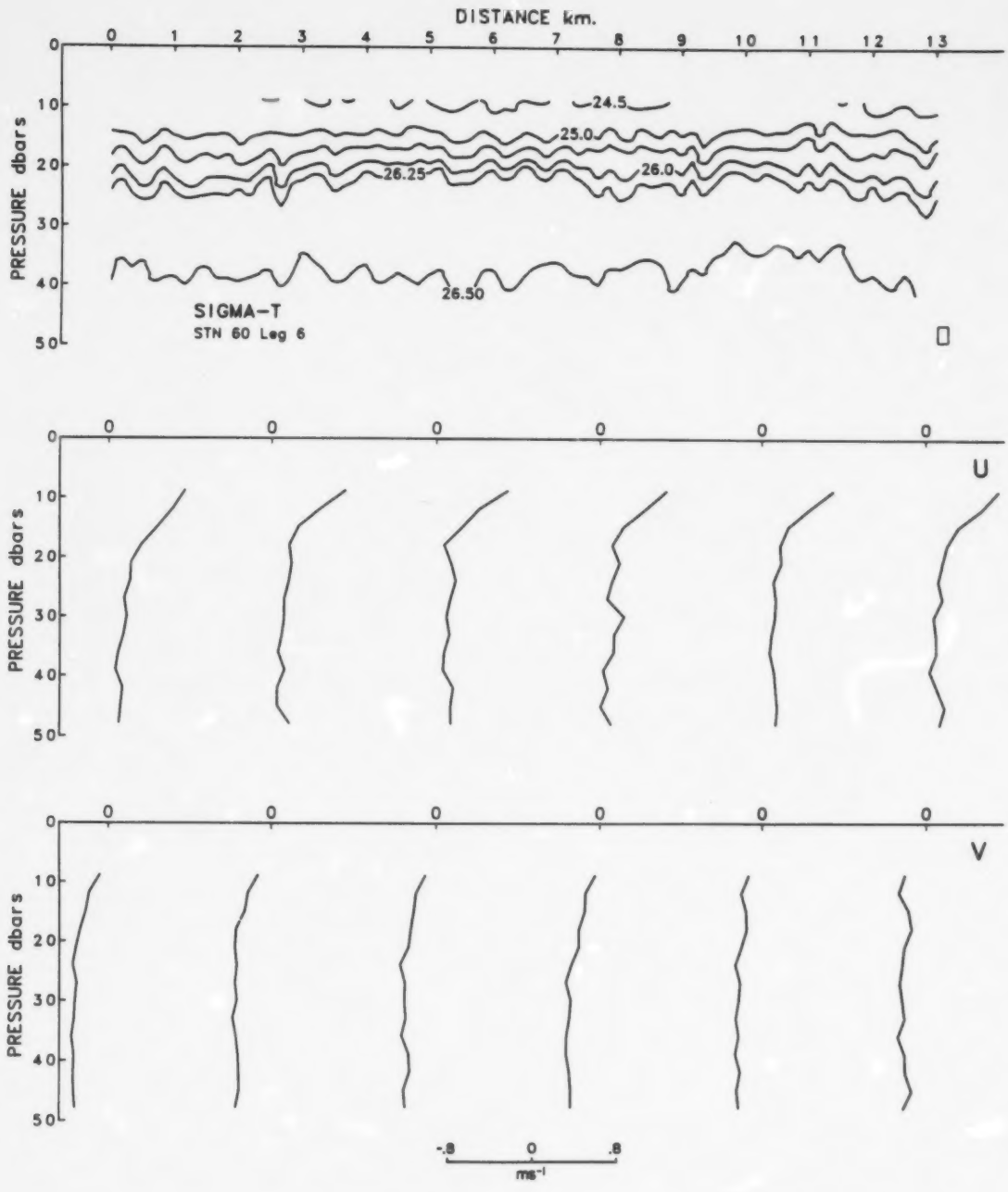

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.25
26.0
26.50
SIGMA-T
STN 60 Leg 6
U
V
-.8 0 .8
ms⁻¹

Fig. 341

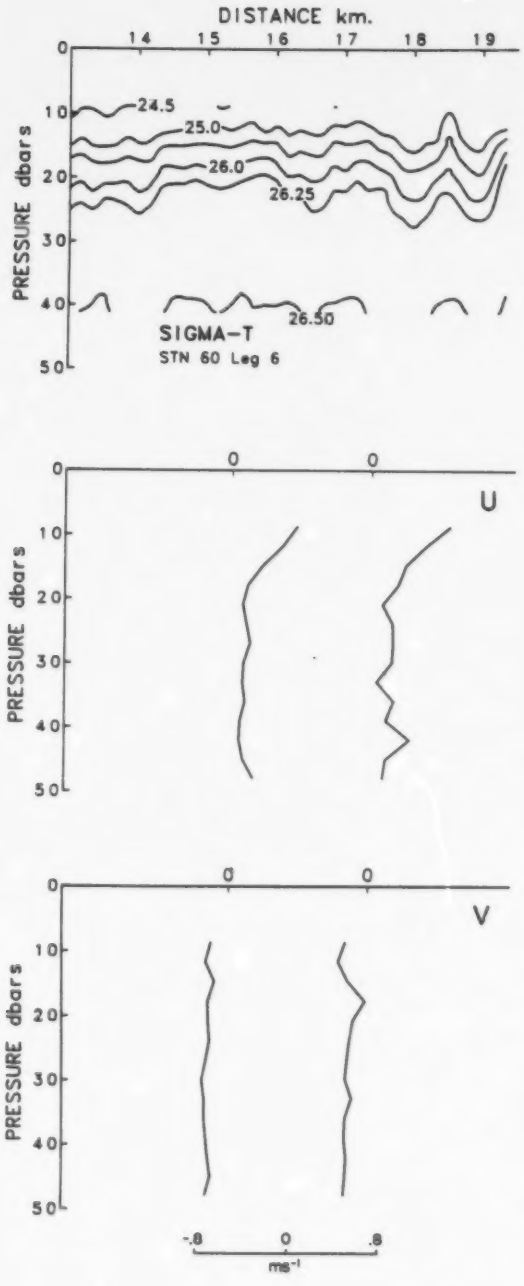

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 6
0
0
U
V
-.8
0
.8
ms⁻¹

Fig. 342

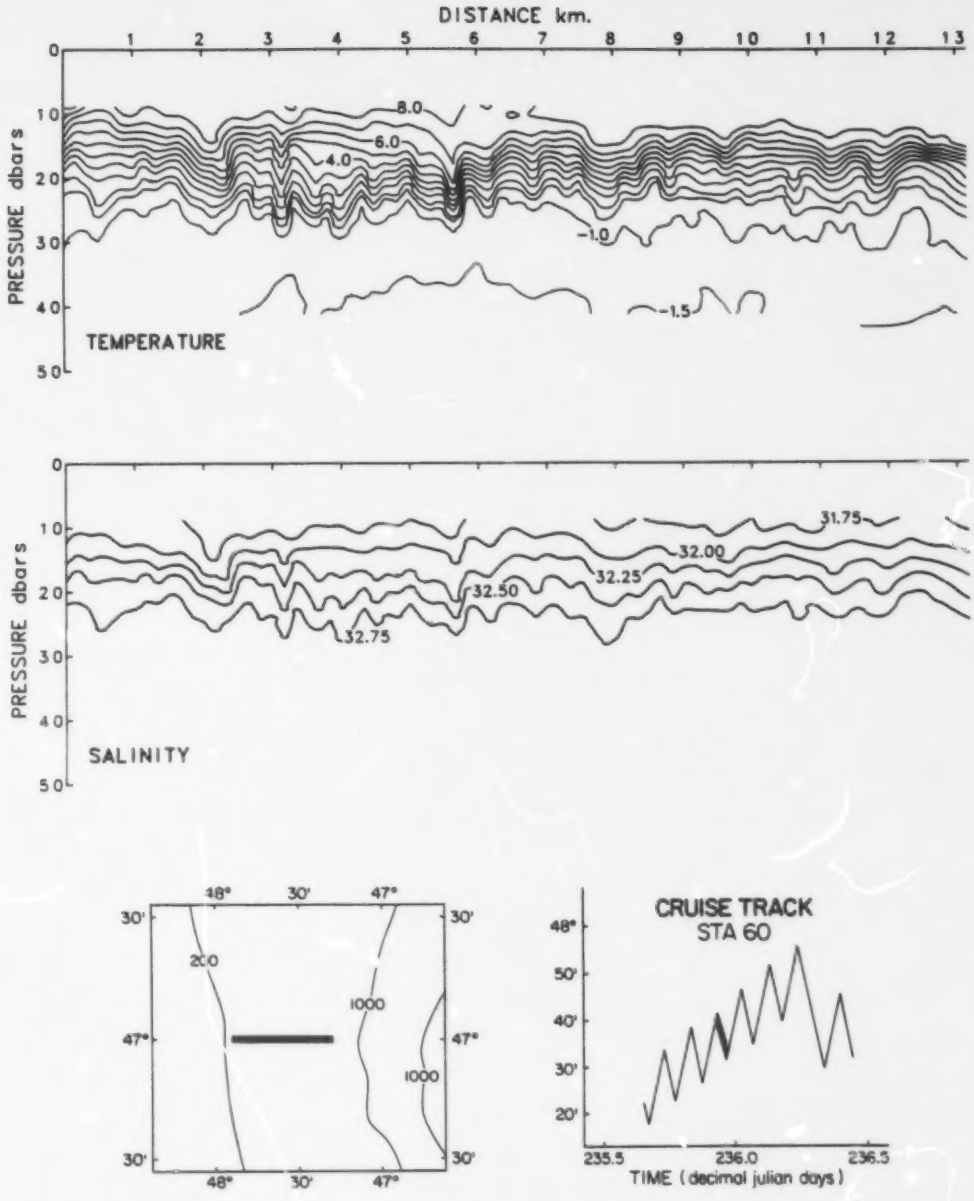

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
8.0
6.0
4.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.25
32.50
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
48° 50' 40' 30' 20'
235.5 236.0 236.5
TIME (decimal julian days)

Fig. 343

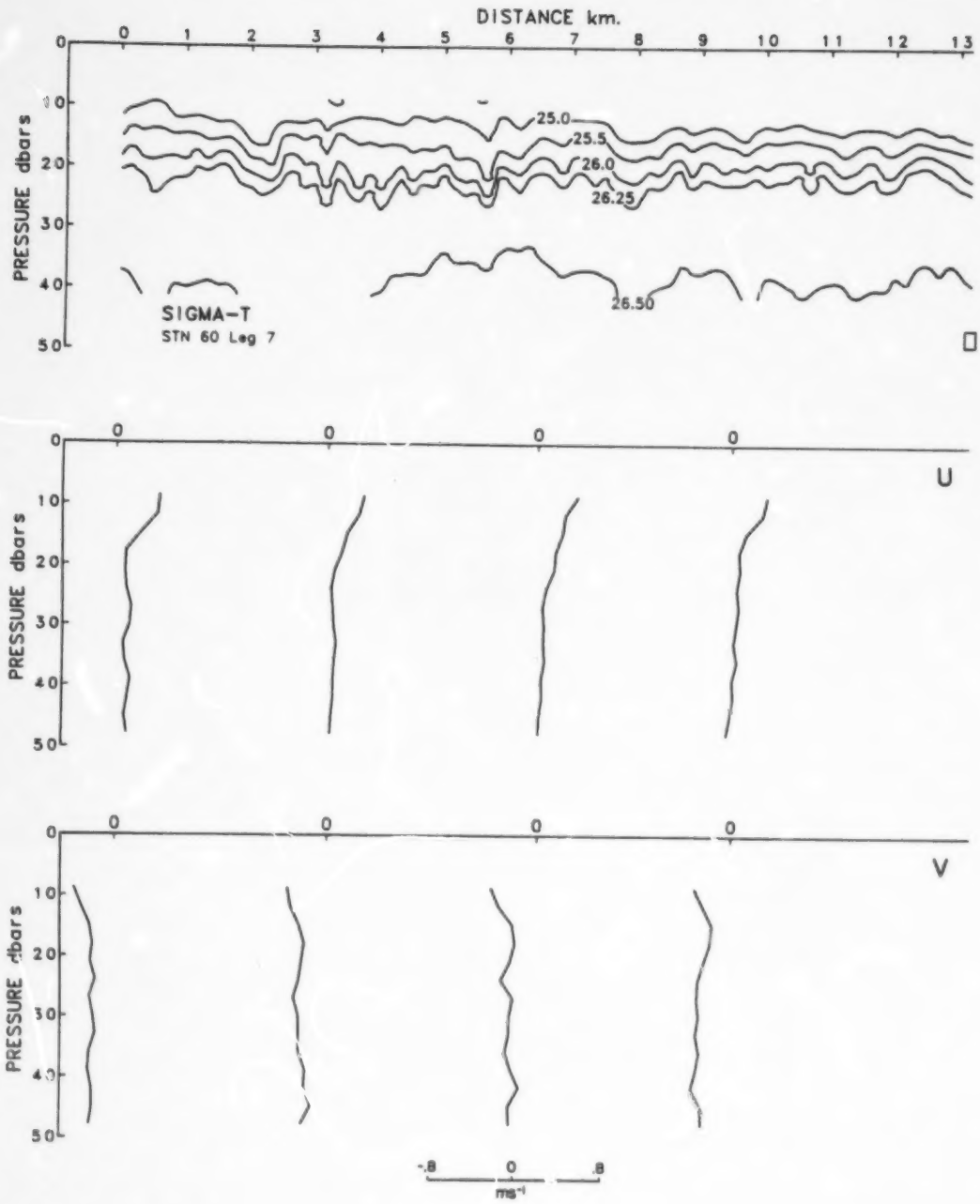

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 7
U
V
-.8 0 .8
ms⁻¹

Fig. 344

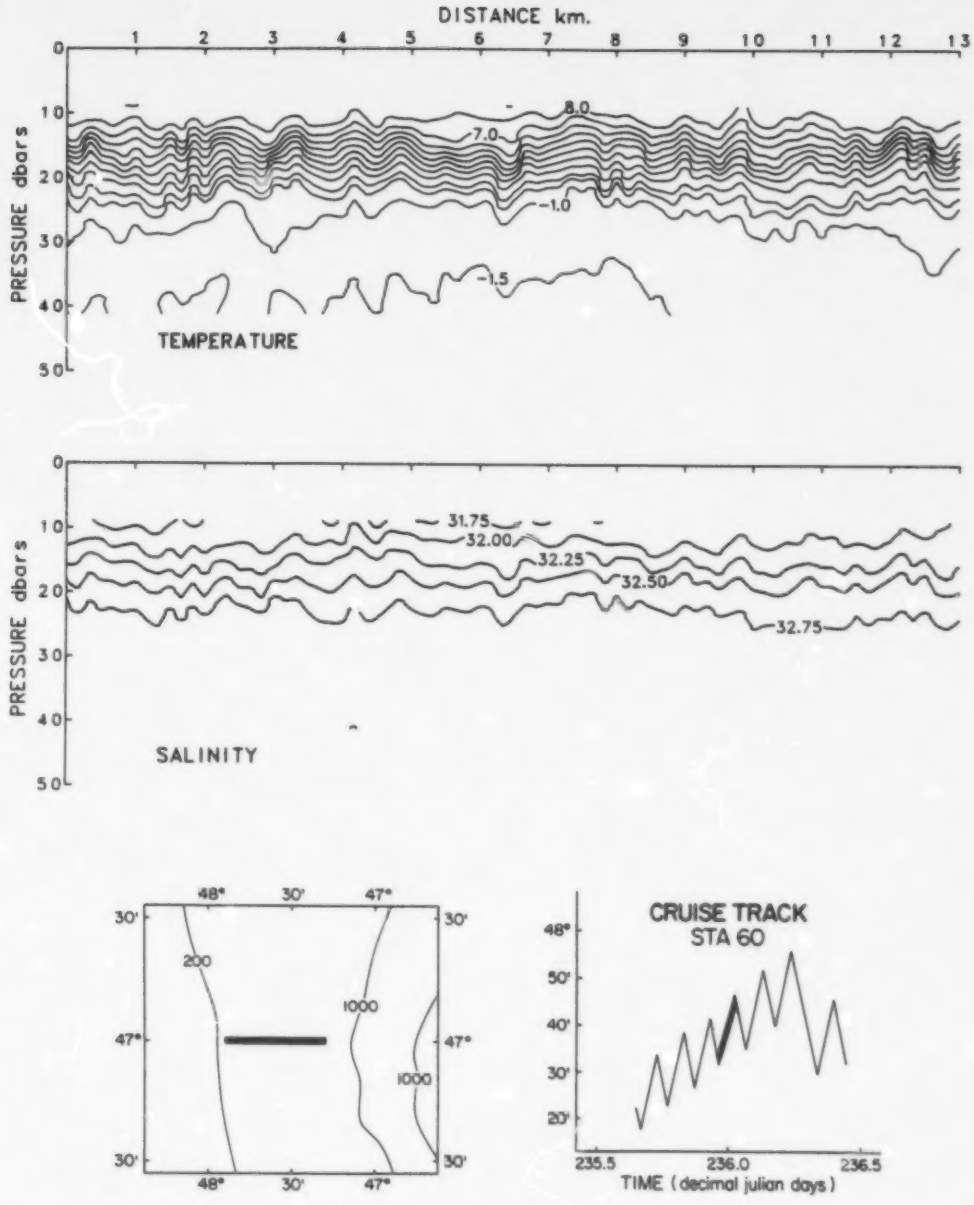

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
8.0
7.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
50'
40'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 345

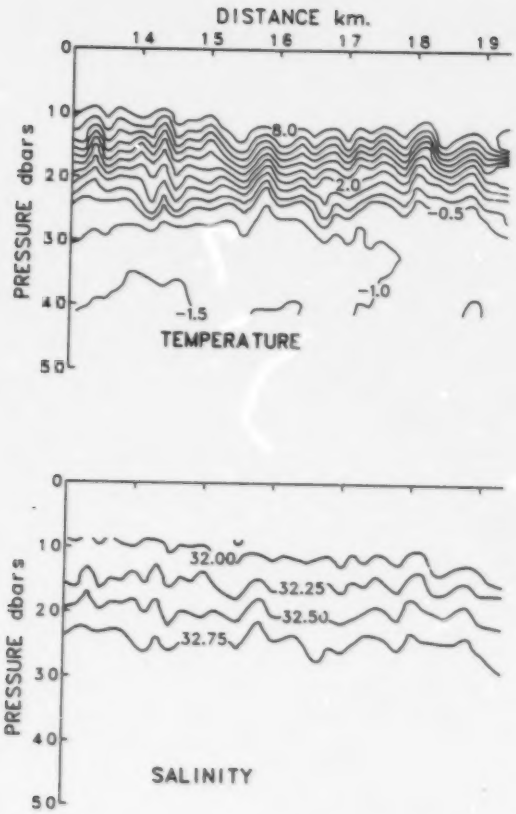

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
8.0
2.0
-0.5
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
SALINITY

Fig. 346

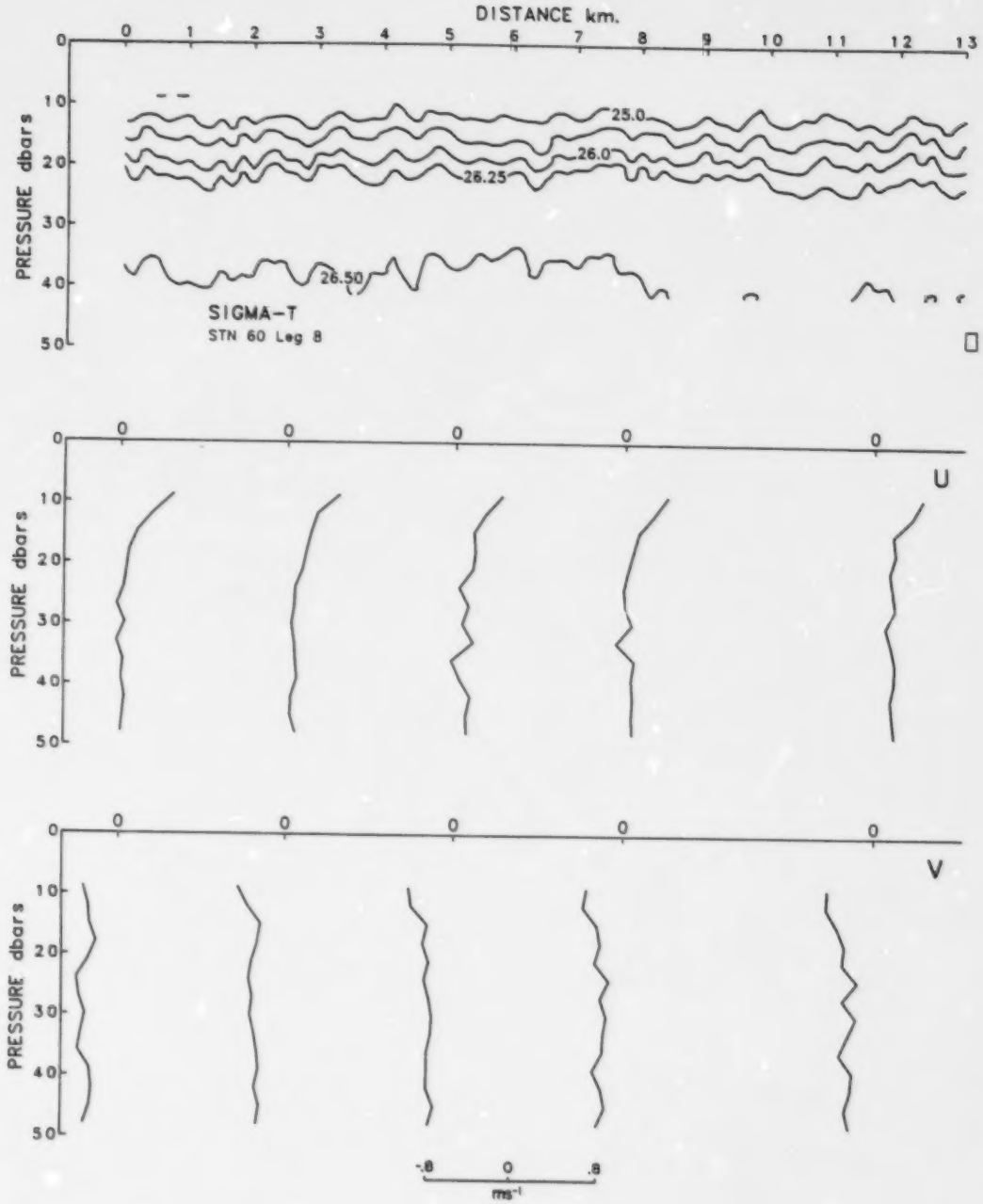

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
25.0
26.0
25.25
26.50
SIGMA-T
STN 60 Leg 8
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 347

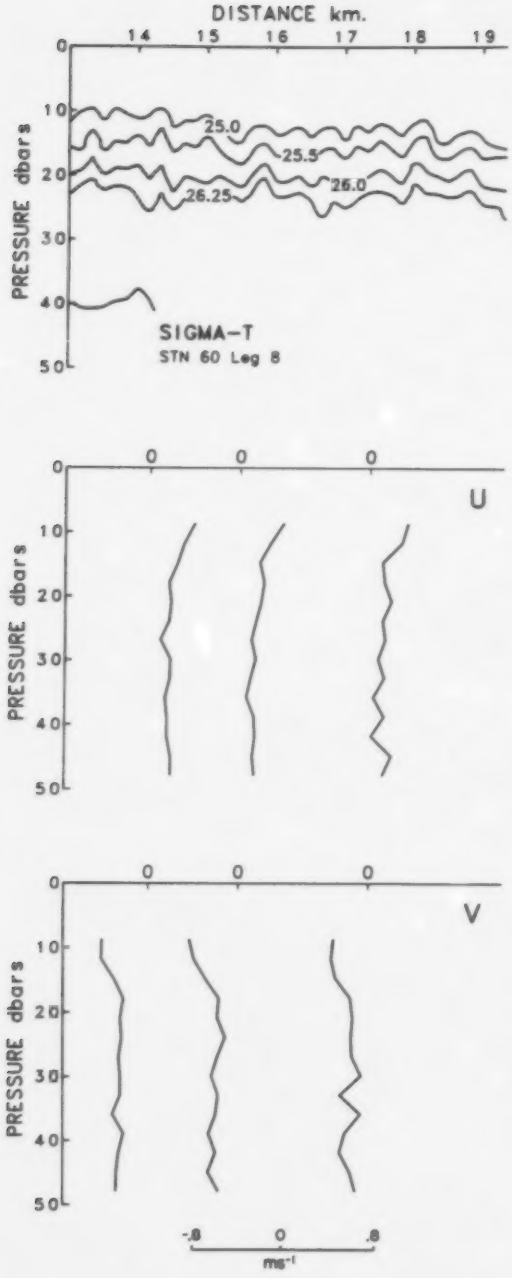

DISTANCE km.
14
15
16
17
18
19
0
10
20
30
40
50
PRESSURE dbars
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 8
0
0
0
U
V
-.8
0
.8
ms-1

Fig. 348

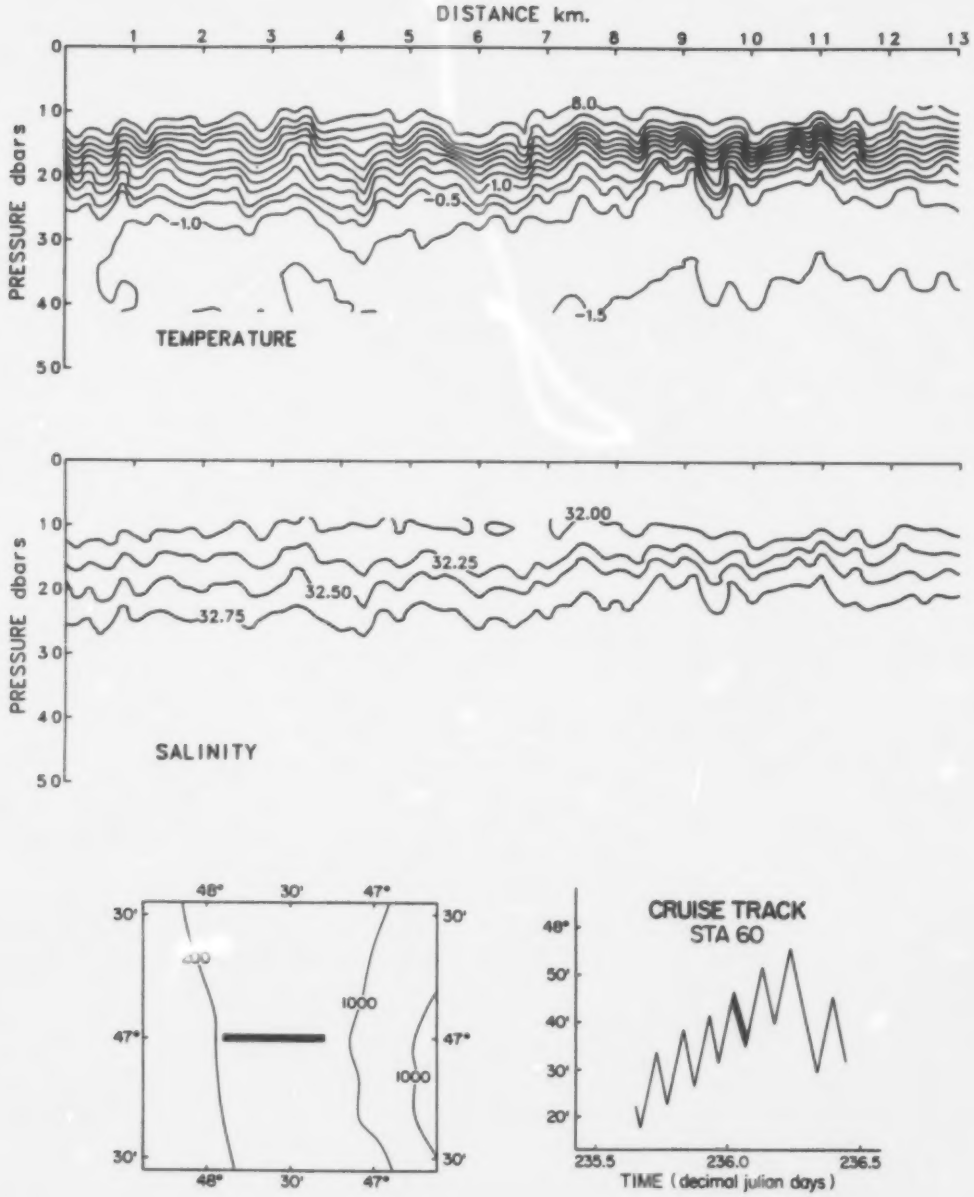

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
-0.5
-1.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
1000
1000
CRUISE TRACK
STA 60
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 349

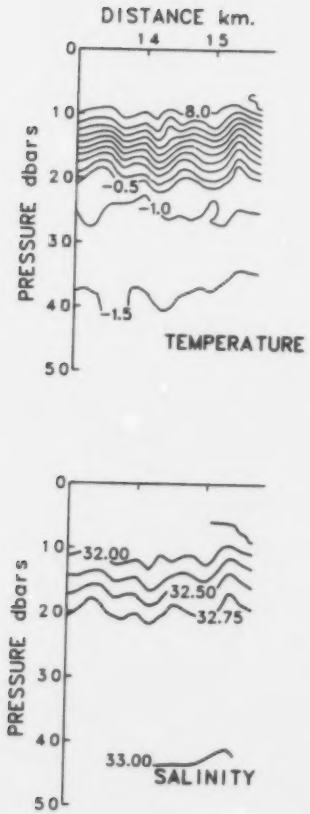

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-0.5
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
32.00
32.50
32.75
33.00
SALINITY

Fig. 350

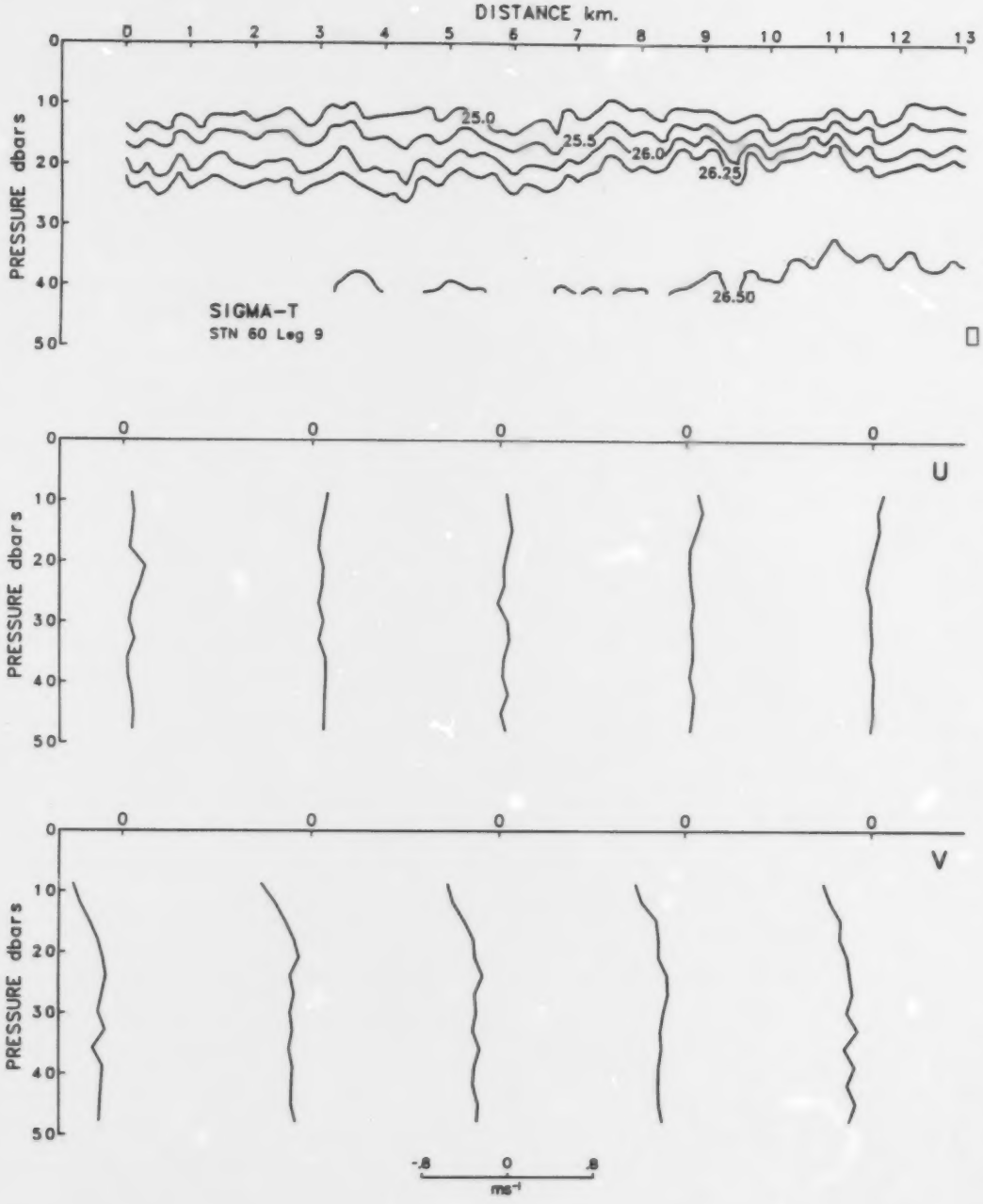

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 9
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 351

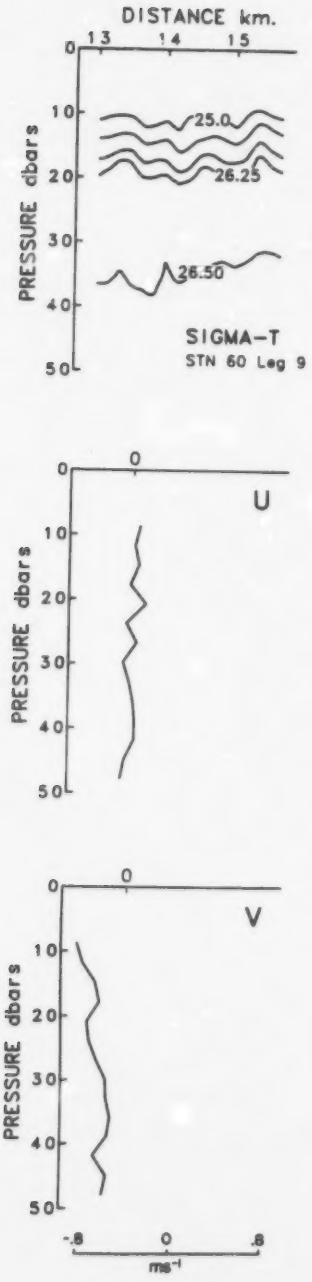
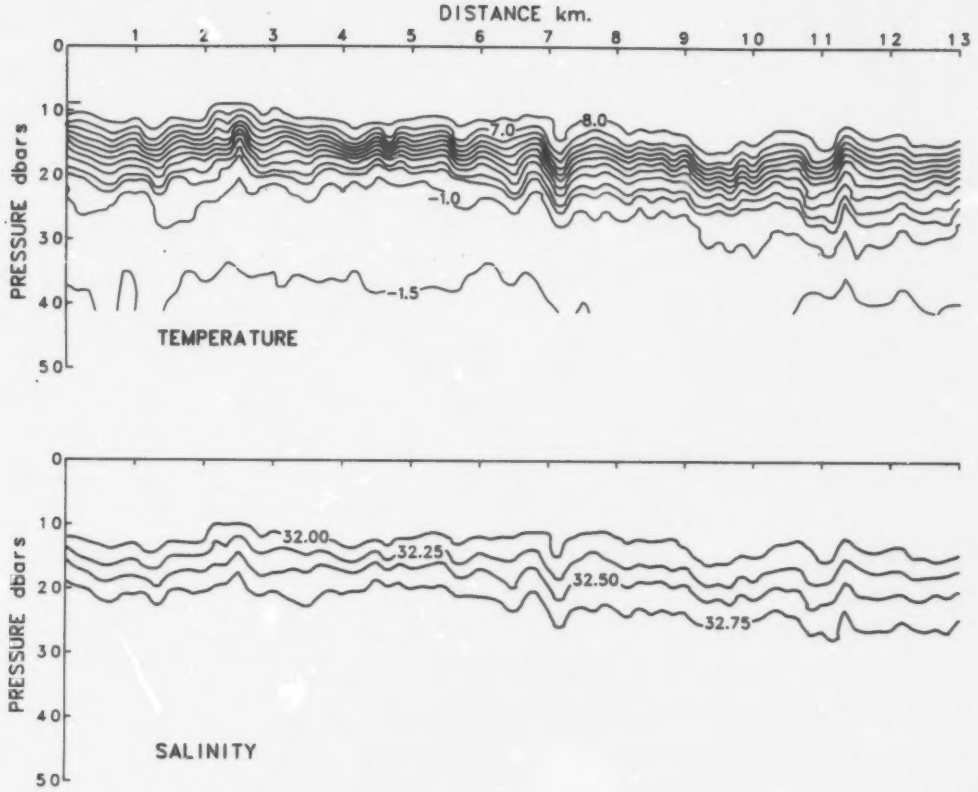
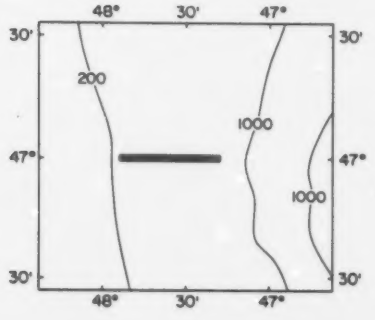

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 60 Leg 9
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 352


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
7.0
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.25
32.50
32.75
SALINITY


48°
30'
47°
200
1000
1000

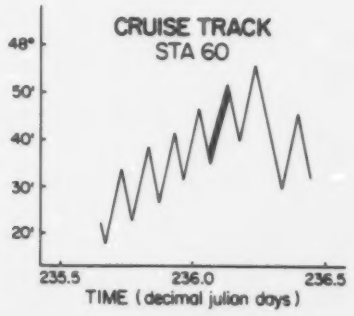

CRUISE TRACK
STA 60
48°
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 353

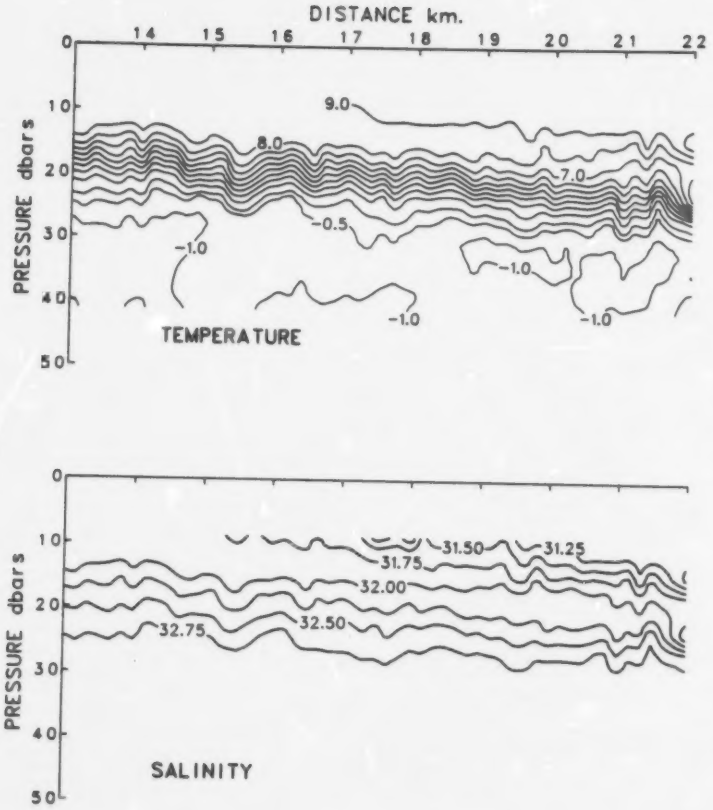

DISTANCE km.
14
15
16
17
18
19
20
21
22
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
7.0
-0.5
-1.0
-1.0
-1.0
-1.0
TEMPERATURE
31.50
31.25
31.75
32.00
32.50
32.75
SALINITY

Fig. 354

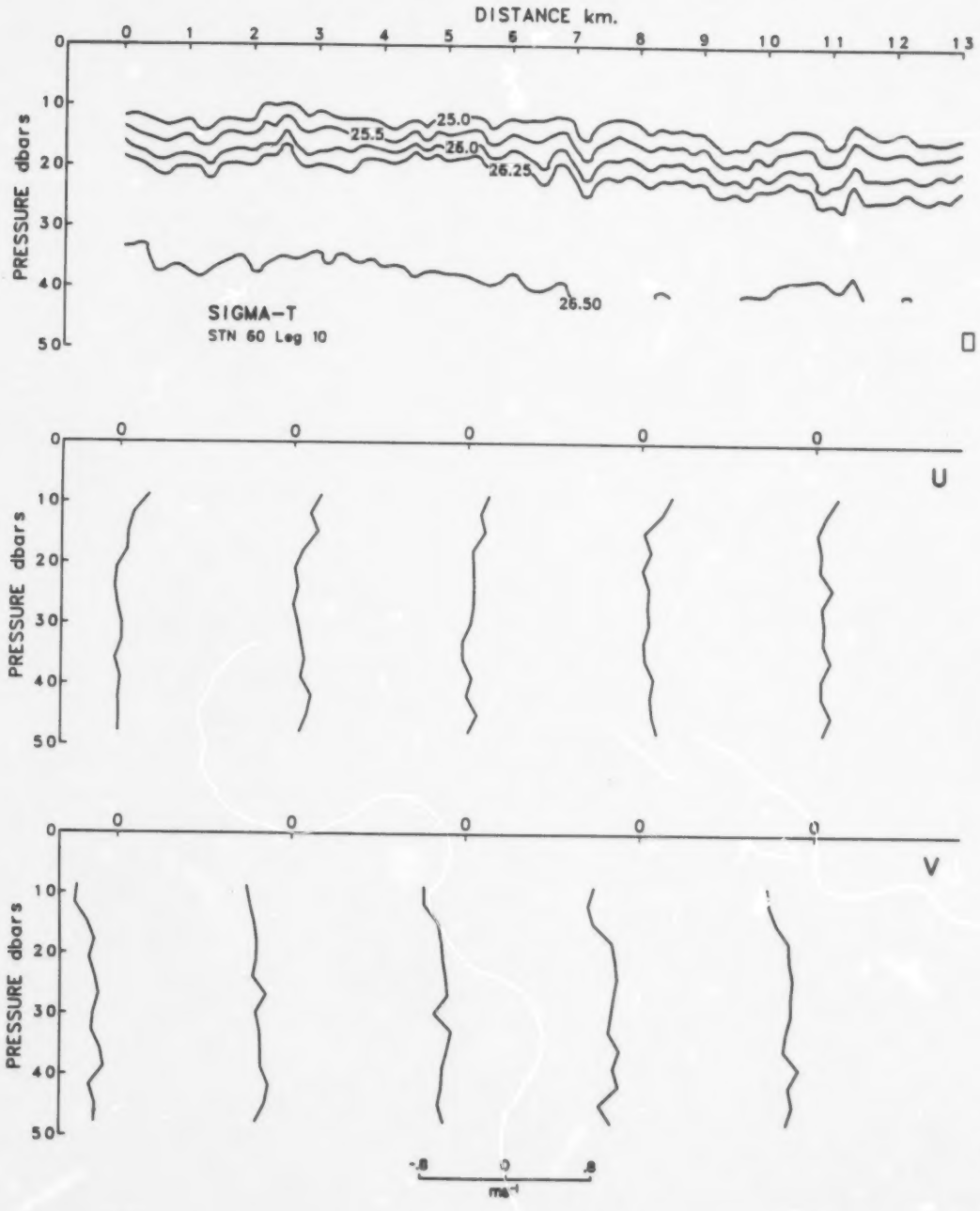

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.5
25.0
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 10
U
V
-.8 0 .8
ms⁻¹

Fig. 355

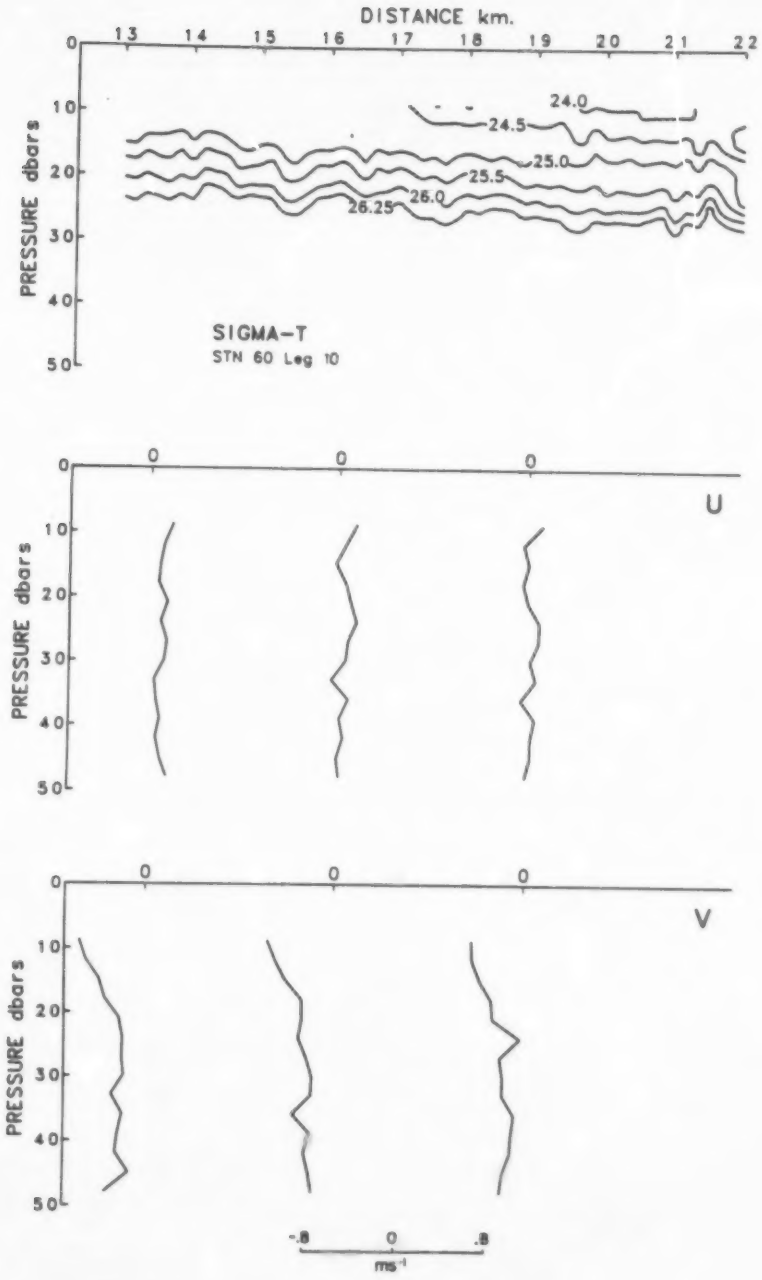

DISTANCE km.
13 14 15 16 17 18 19 20 21 22
PRESSURE dbars
24.0
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 10
U
V
-.8 0 .8
ms⁻¹

Fig. 356

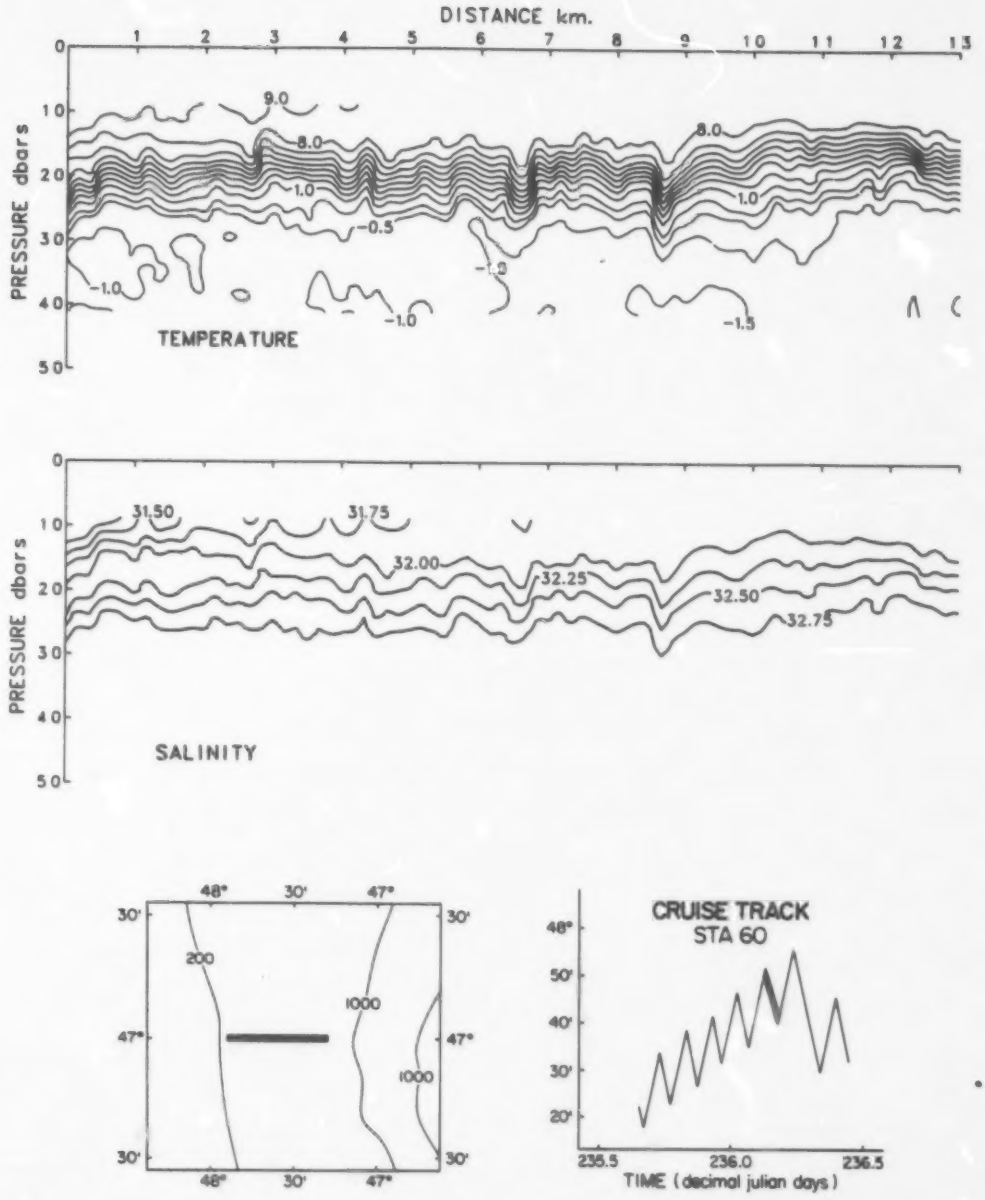

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
1.0
-0.5
-1.0
-1.0
-1.0
-1.5
8.0
1.0
TEMPERATURE
31.50
31.75
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
50'
40'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 357

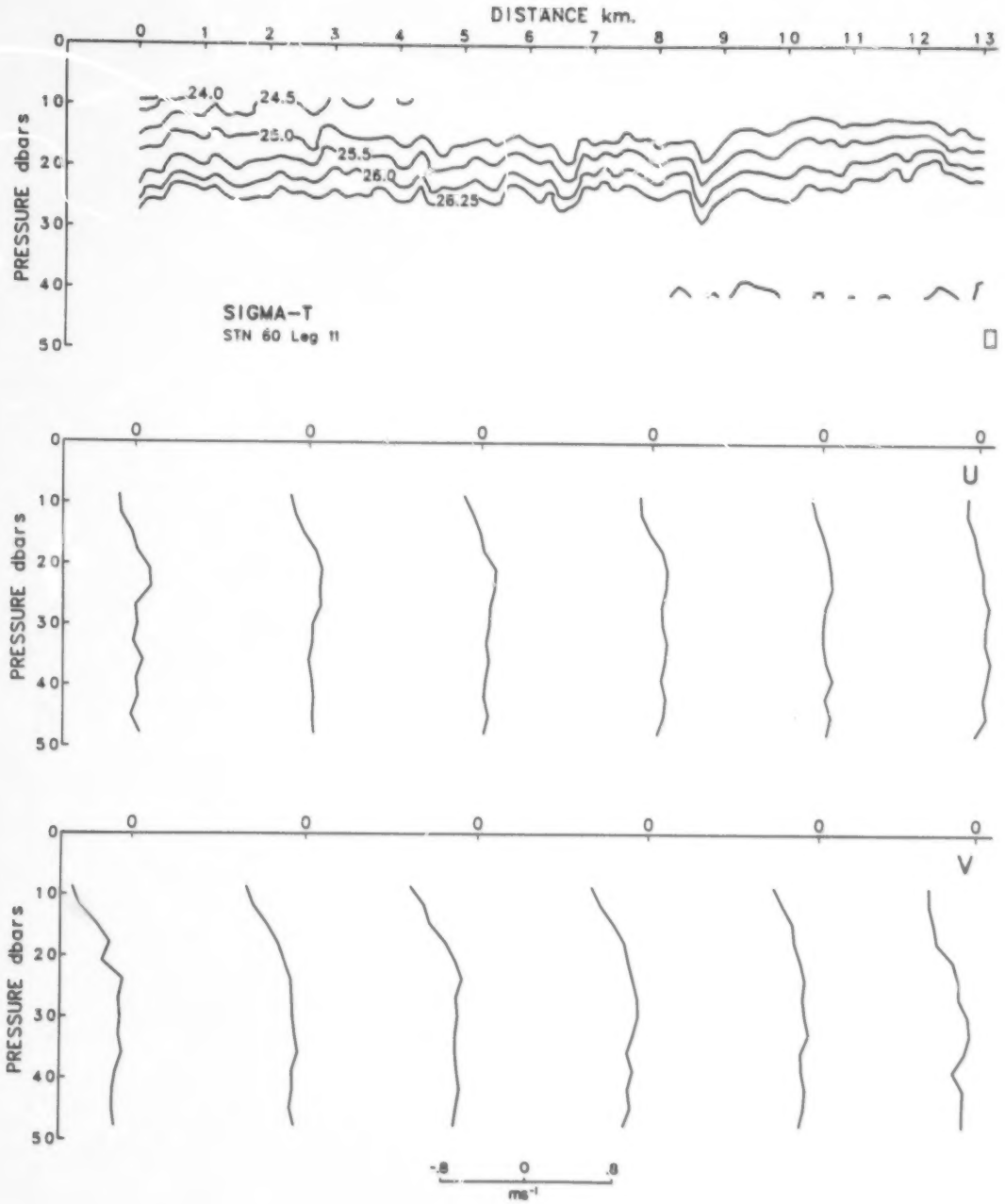
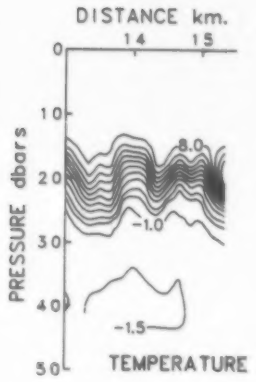
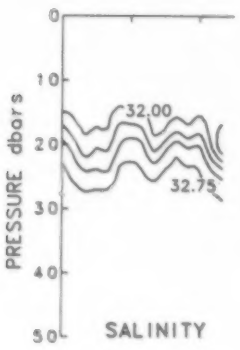

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 11
0 0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 358


DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE


0
10
20
30
40
50
PRESSURE dbars
32.00
32.75
SALINITY

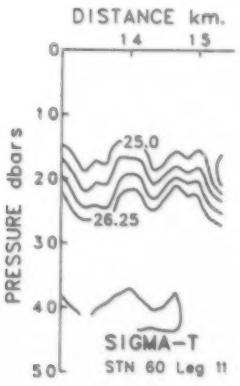

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
25.0
26.25
SIGMA-T
STN 60 Leg 11

Fig. 359

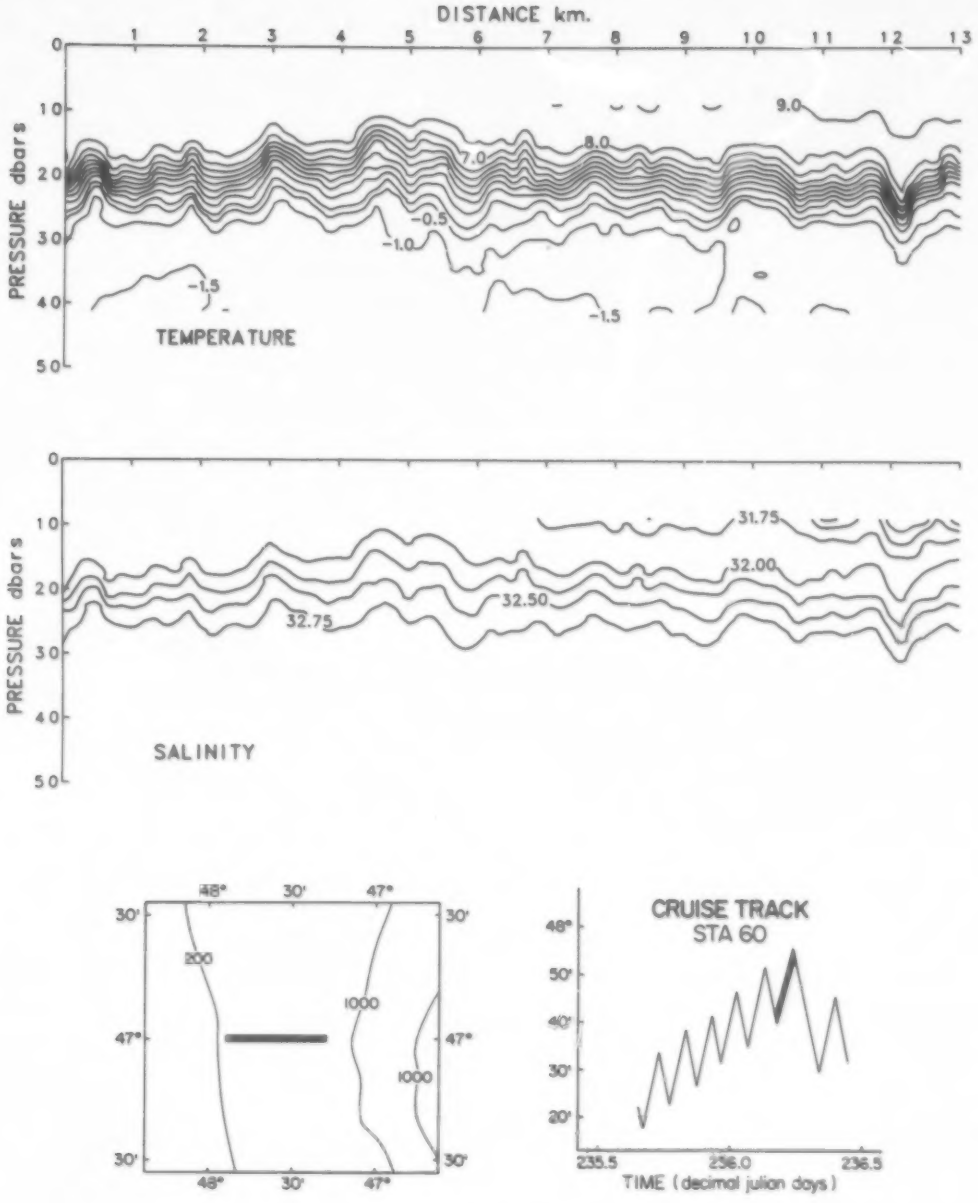

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
7.0
-0.5
-1.0
-1.5
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
31.75
32.00
32.50
32.75
SALINITY
48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 60
48°
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 360

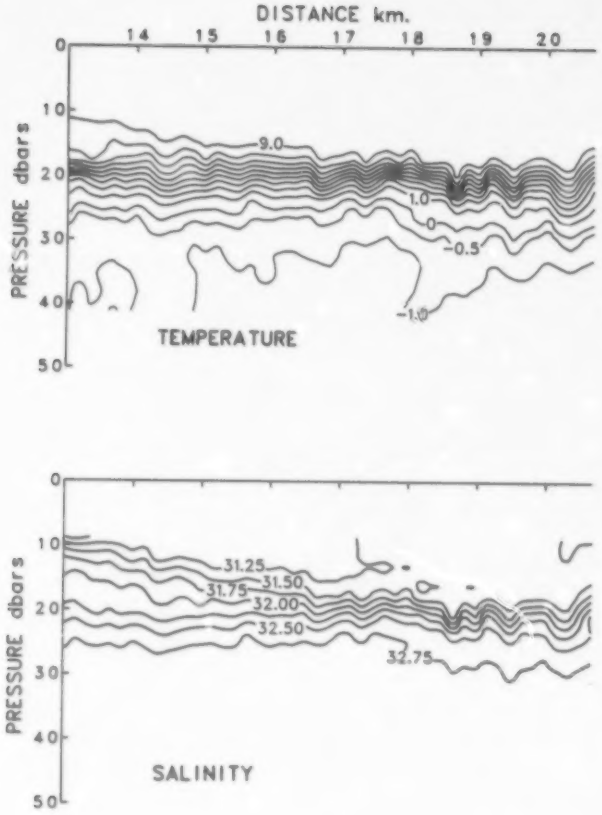

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
9.0
1.0
0
-0.5
-1.0
TEMPERATURE
31.25
31.50
31.75
32.00
32.50
32.75
SALINITY

Fig. 361

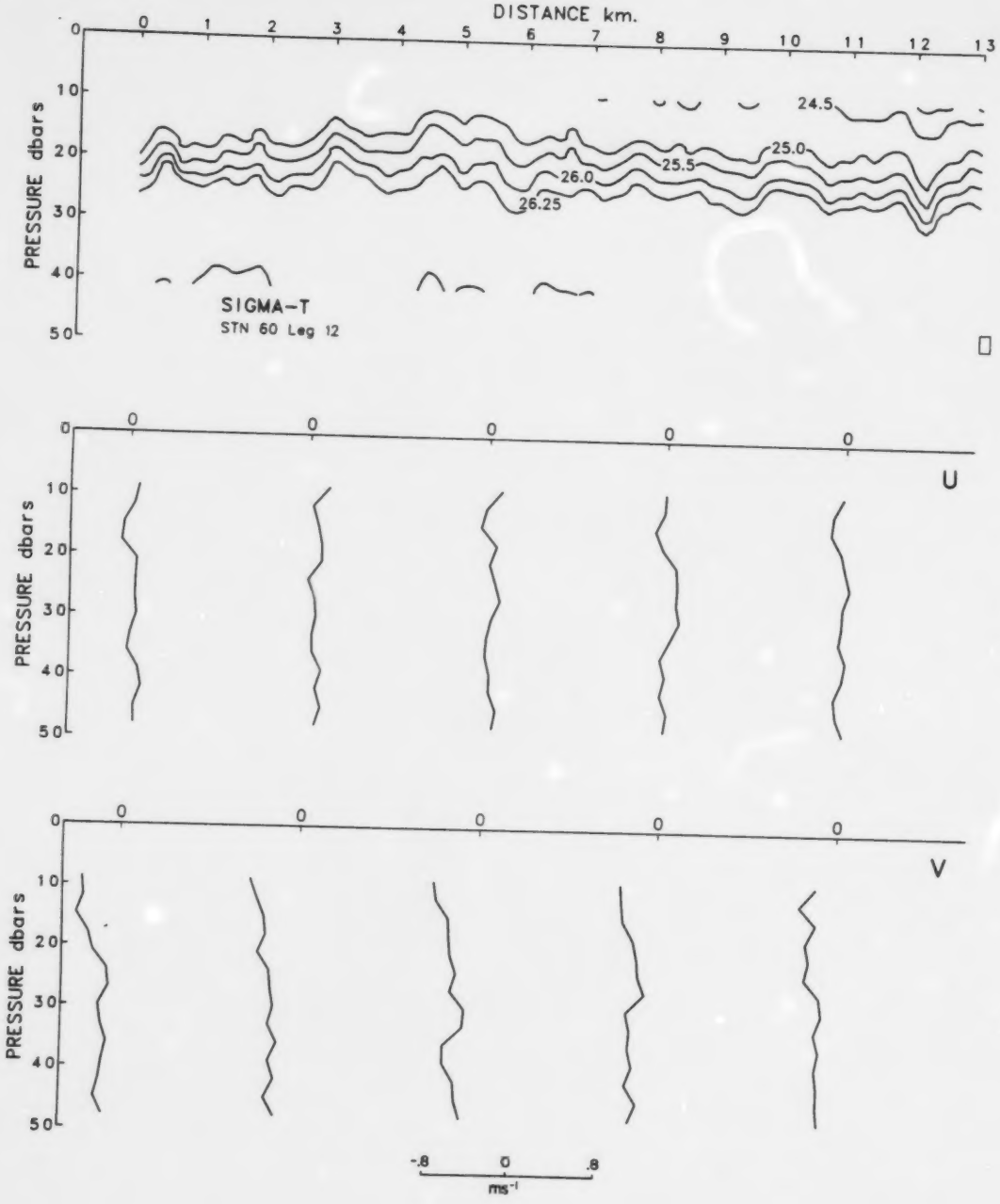

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 12
0 0 0 0 0
U
0 0 0 0 0
V
-.8 0 .8
ms⁻¹

Fig. 362

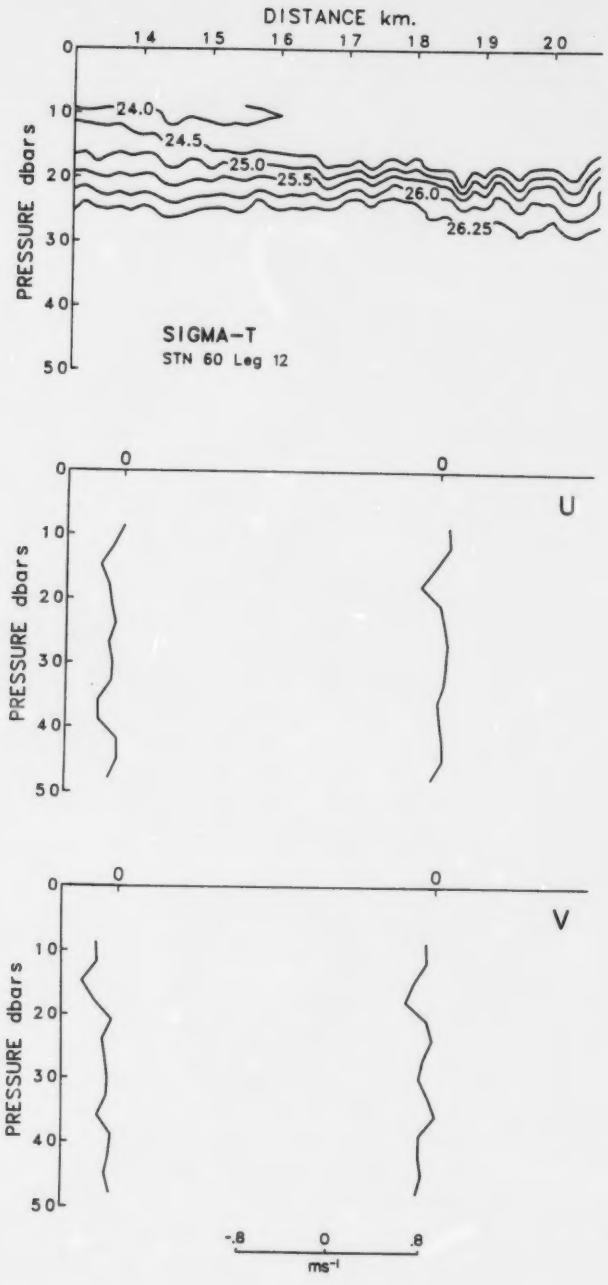

DISTANCE km.
14
15
16
17
18
19
20
0
10
20
30
40
50
PRESSURE dbars
24.0
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 12
0
0
U
V
-.8
0
.8
ms⁻¹

Fig. 363

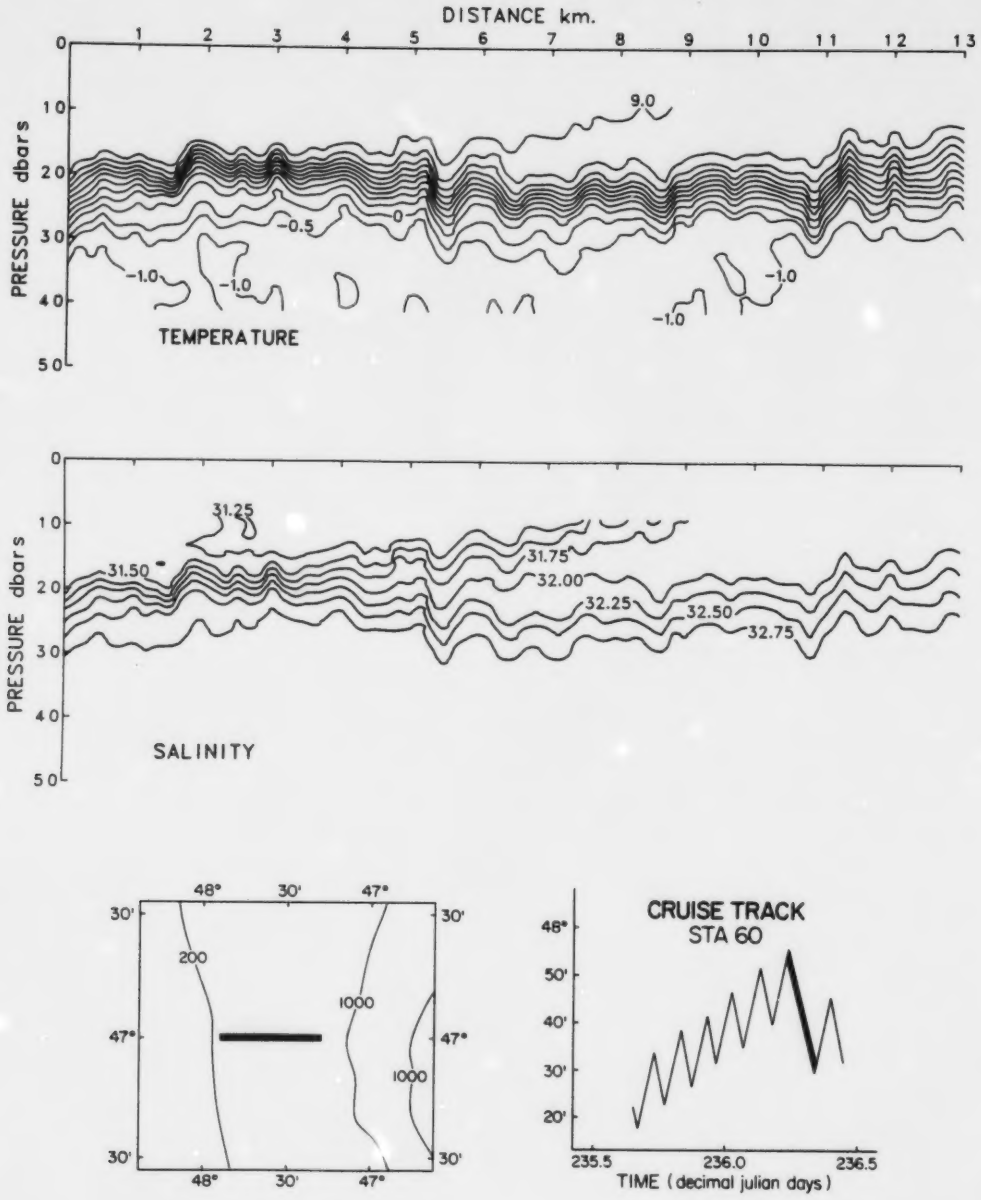

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
-0.5
0
-1.0
-1.0
-1.0
-1.0
TEMPERATURE
31.25
31.50
31.75
32.00
32.25
32.50
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
48°
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 364

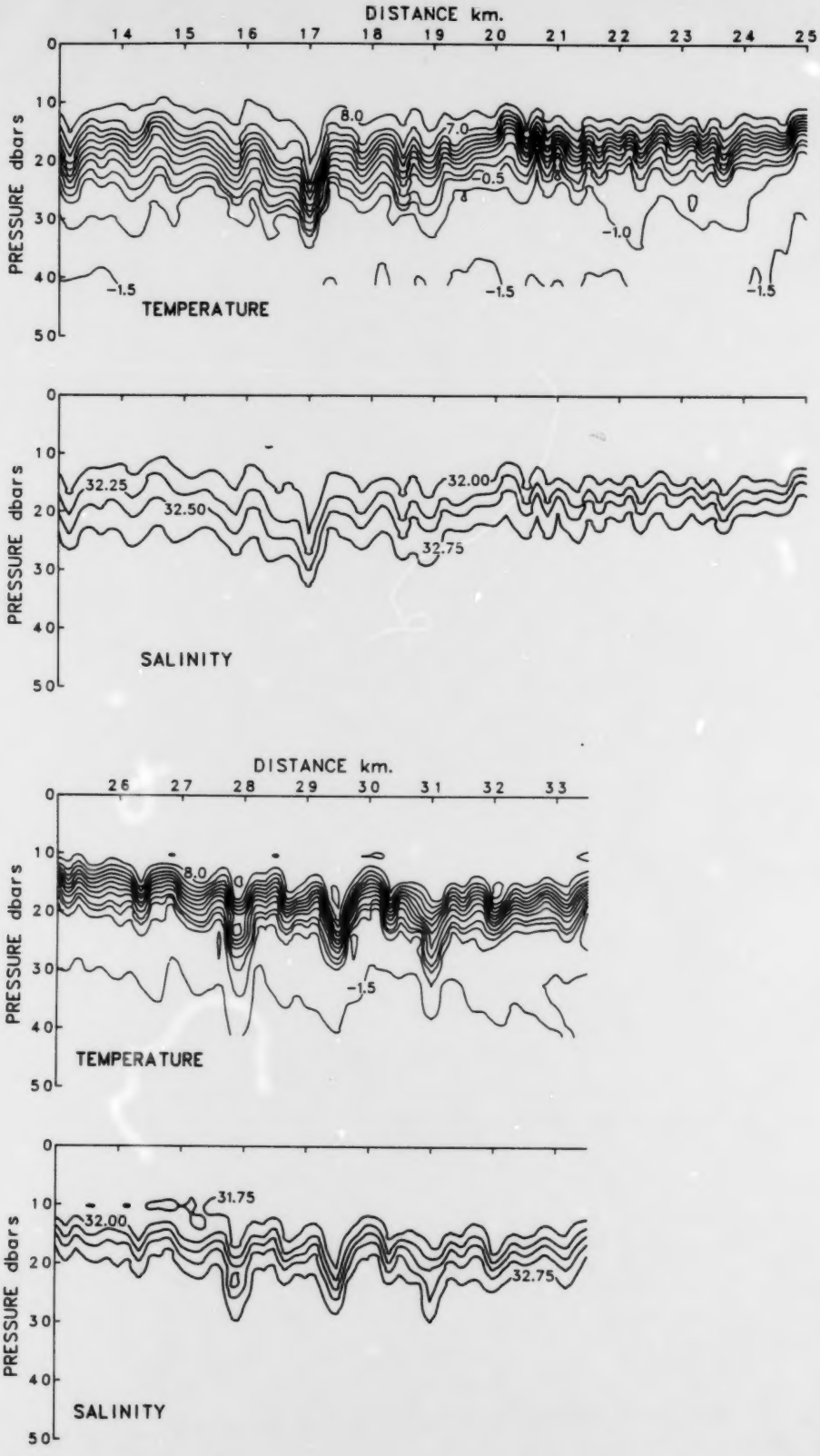

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
0 10 20 30 40 50
8.0
7.0
-0.5
-1.0
-1.5
TEMPERATURE
32.25
32.50
32.00
32.75
SALINITY
DISTANCE km.
26 27 28 29 30 31 32 33
8.0
-1.5
TEMPERATURE
31.75
32.00
32.75
SALINITY

Fig. 365

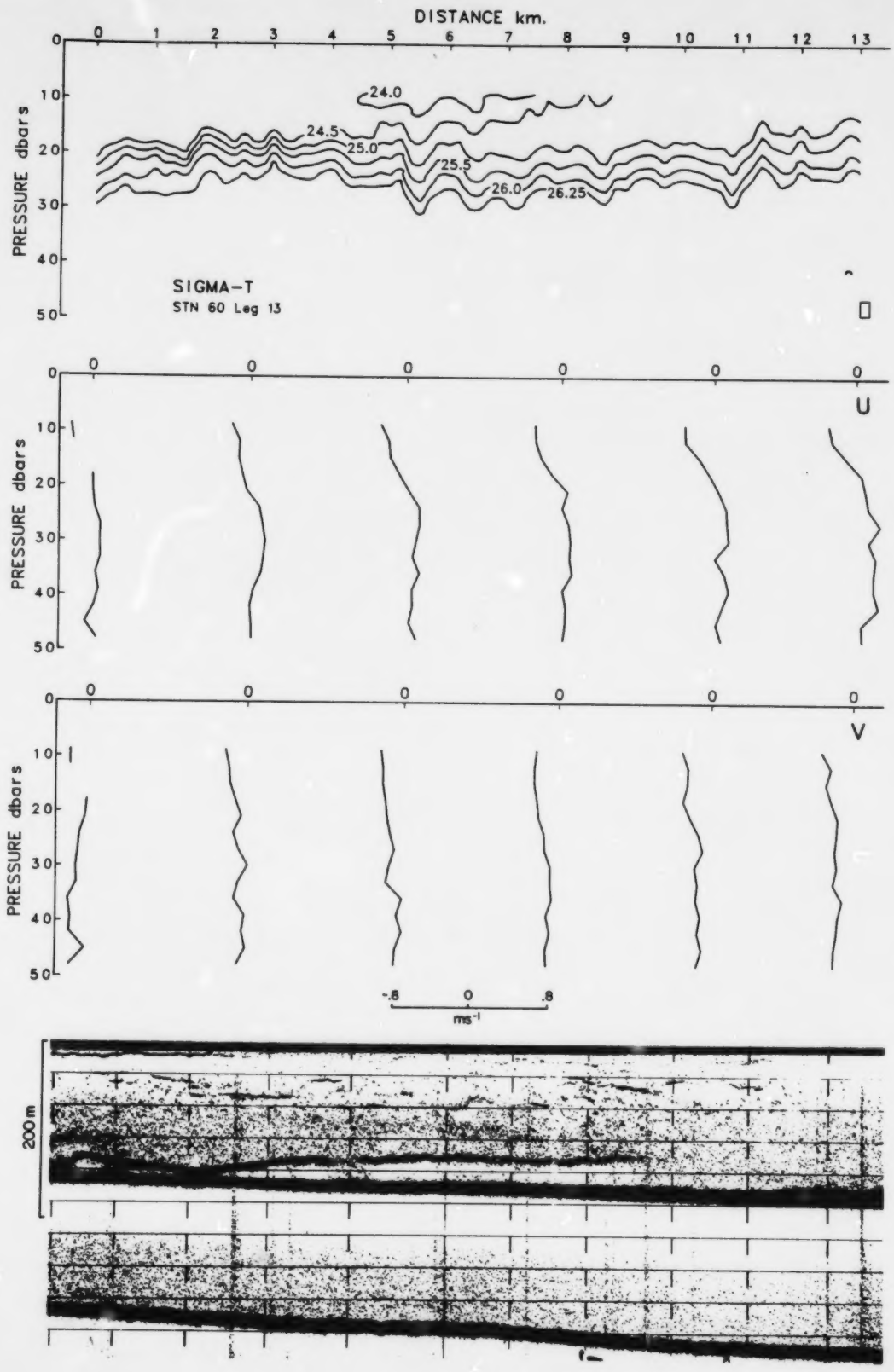

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.0
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 13
0 0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 366

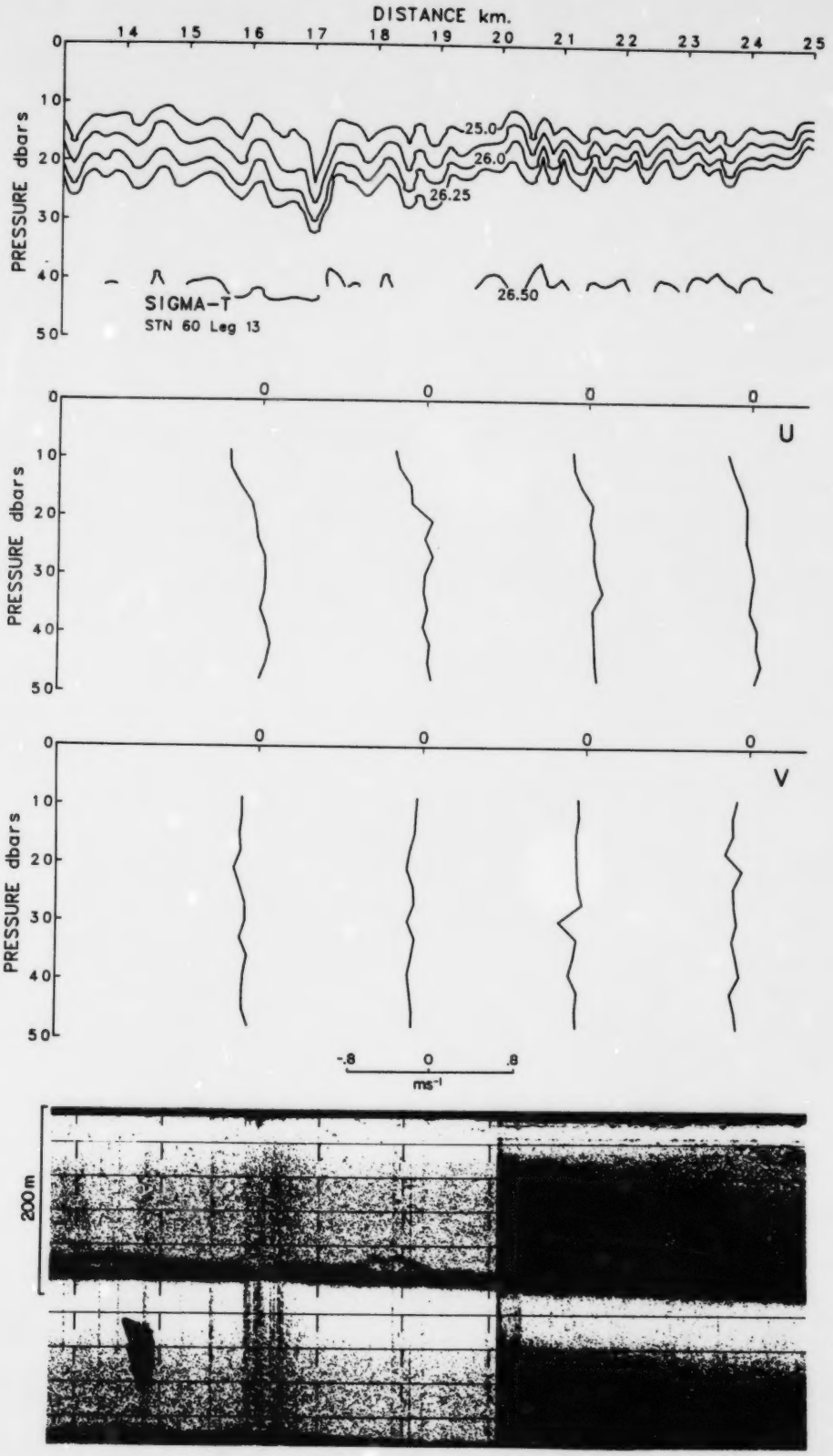

DISTANCE km.
14 15 16 17 18 19 20 21 22 23 24 25
PRESSURE dbars
25.0
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 13
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 367

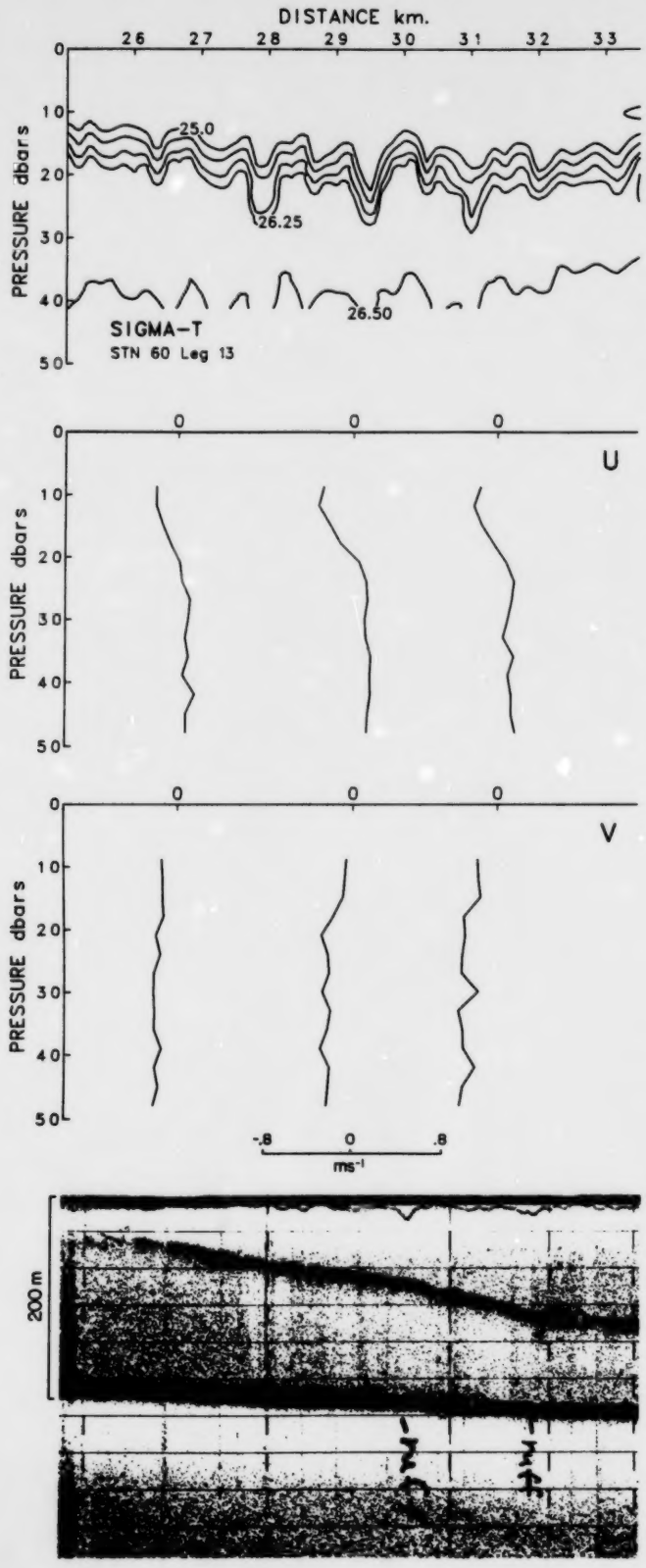

DISTANCE km.
26 27 28 29 30 31 32 33
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 60 Leg 13
U
V
-.8 0 .8
ms⁻¹
200 m

Fig. 368.

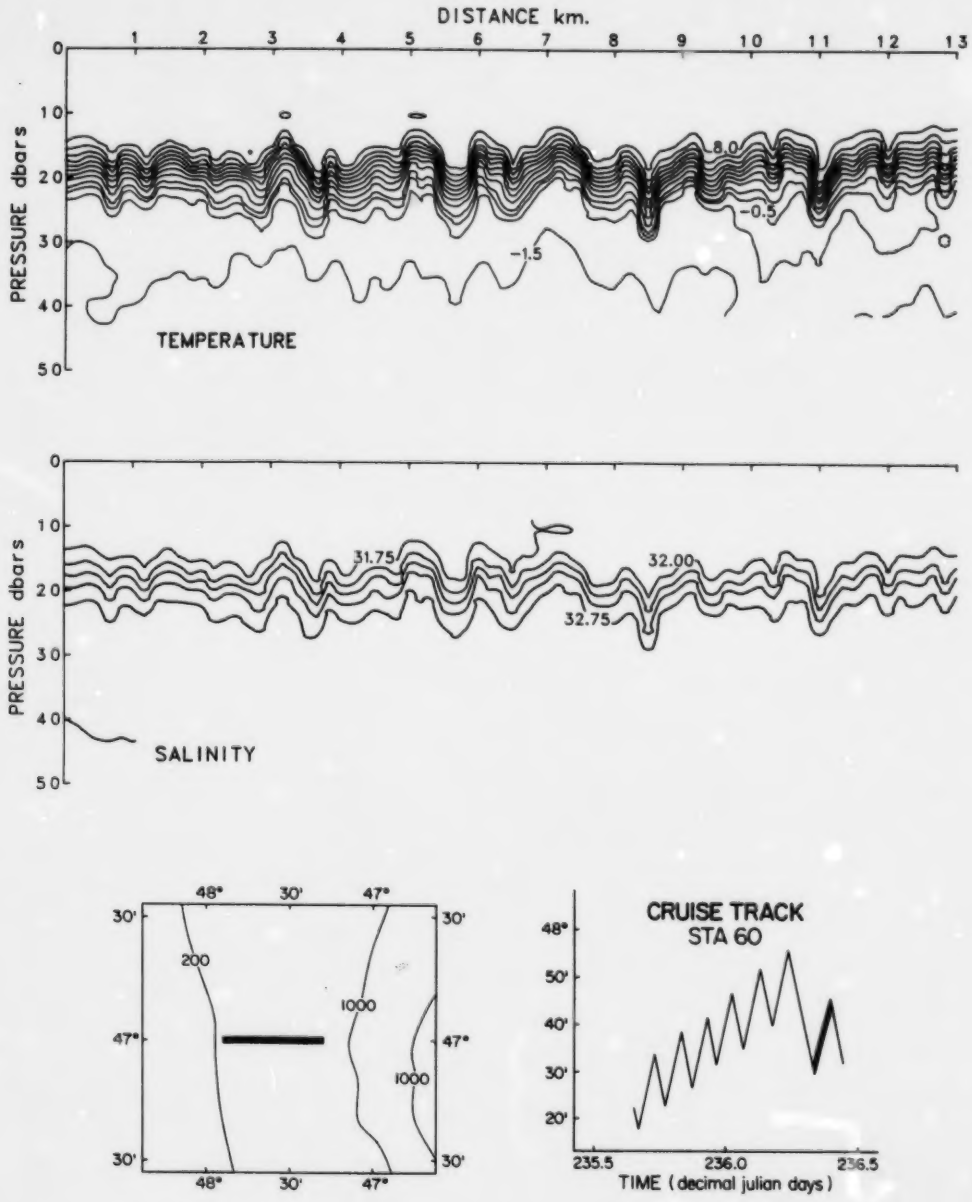

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0 10 20 30 40 50
PRESSURE dbars
8.0
-0.5
-1.5
0
TEMPERATURE
31.75
32.00
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 60
48° 50' 40' 30' 20'
235.5 236.0 236.5
TIME (decimal julian days)

Fig. 369

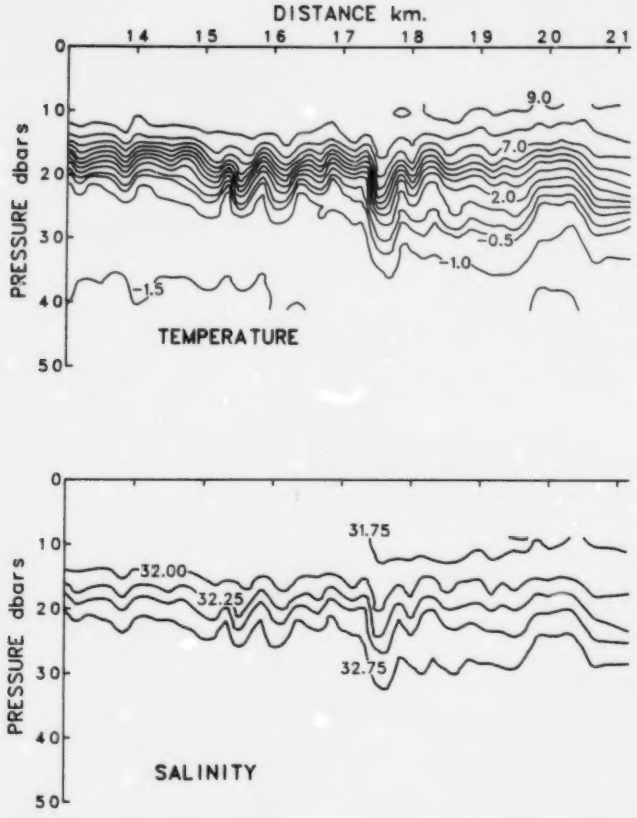

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
9.0
7.0
2.0
-0.5
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.25
32.75
SALINITY

Fig. 370

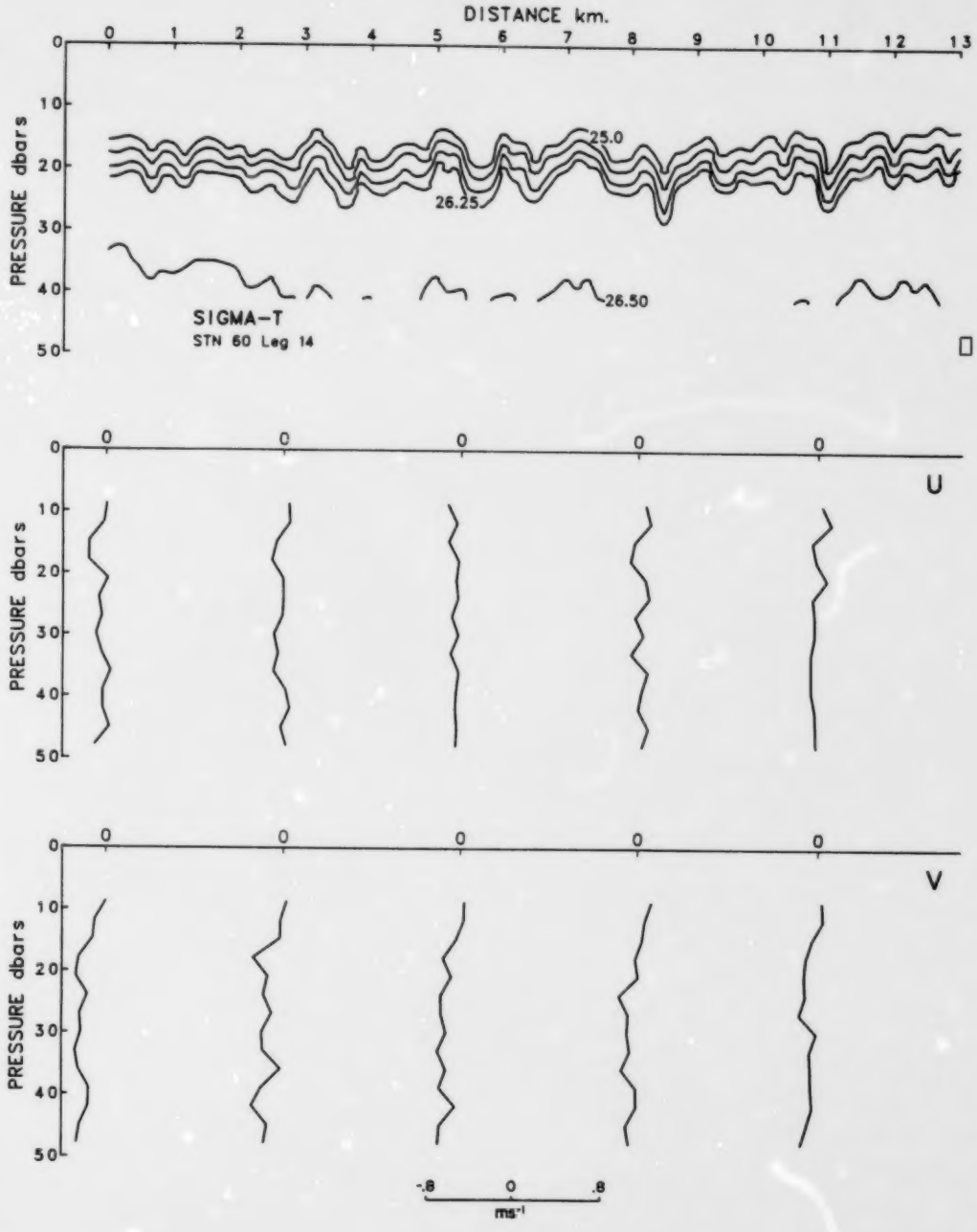

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 60 Leg 14
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 371

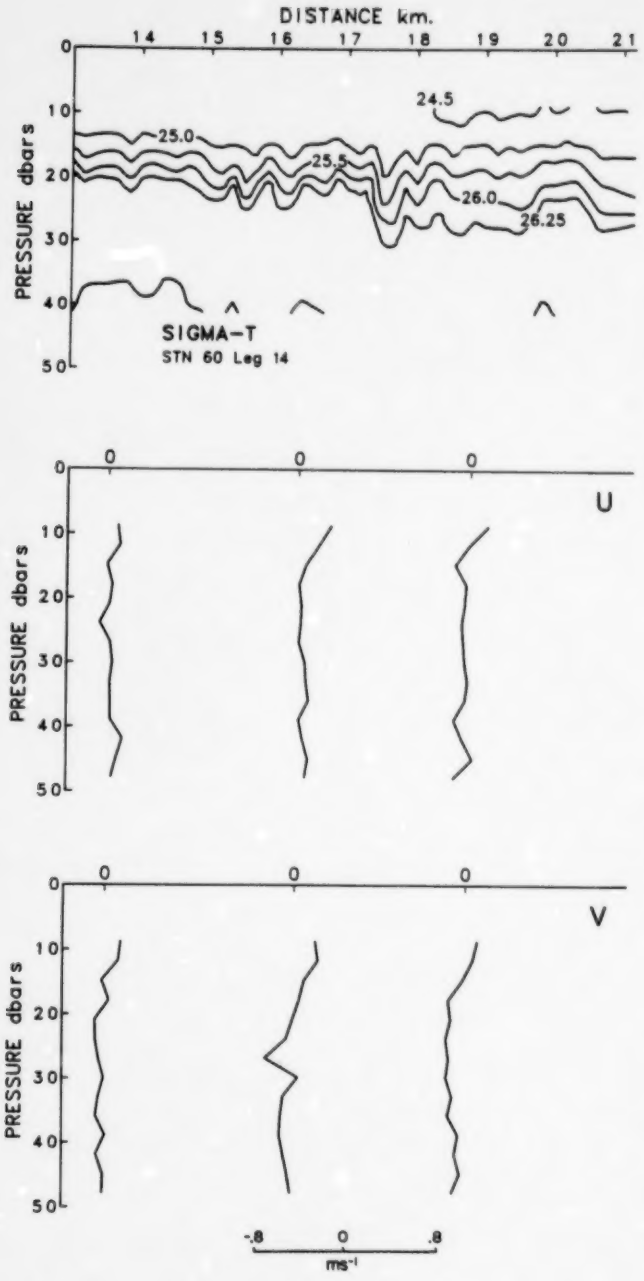
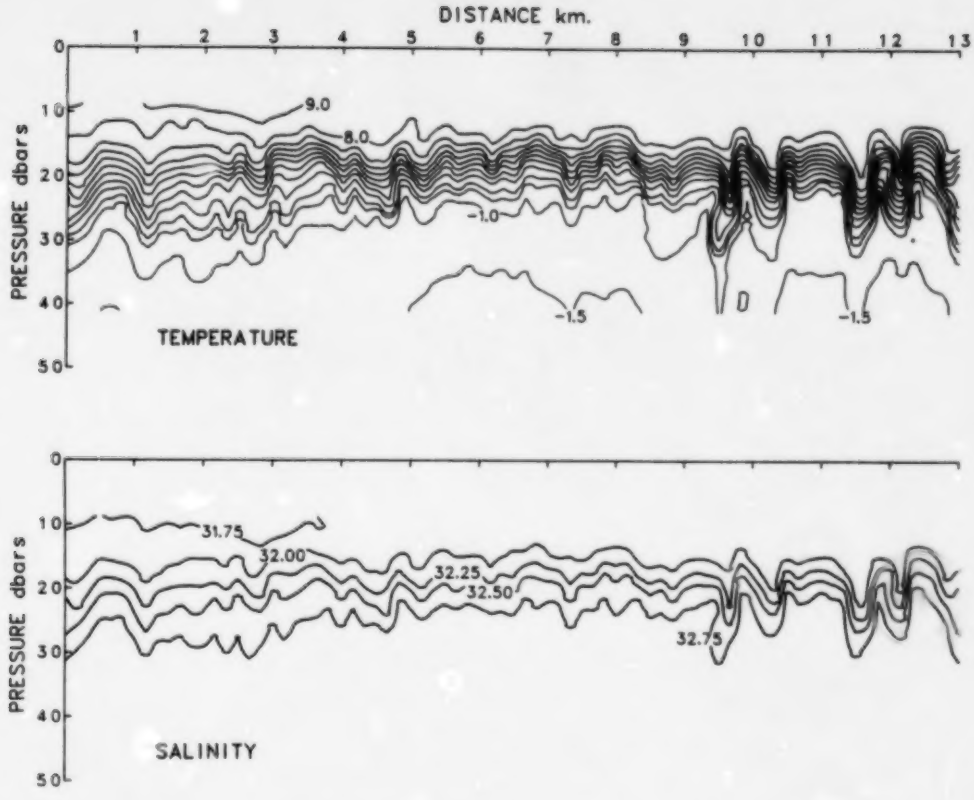

DISTANCE km.
14
15
16
17
18
19
20
21
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
25.5
26.0
26.25
SIGMA-T
STN 60 Leg 14
U
V
-.8
.8
ms⁻¹

Fig. 372


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
-1.0
-1.5
-1.5
TEMPERATURE
PRESSURE dbars
31.75
32.00
32.25
32.50
32.75
SALINITY

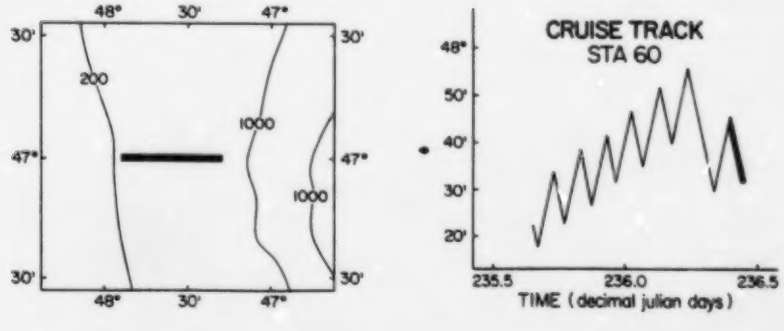

48°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 60
50'
40'
30'
20'
235.5
236.0
236.5
TIME (decimal julian days)

Fig. 373

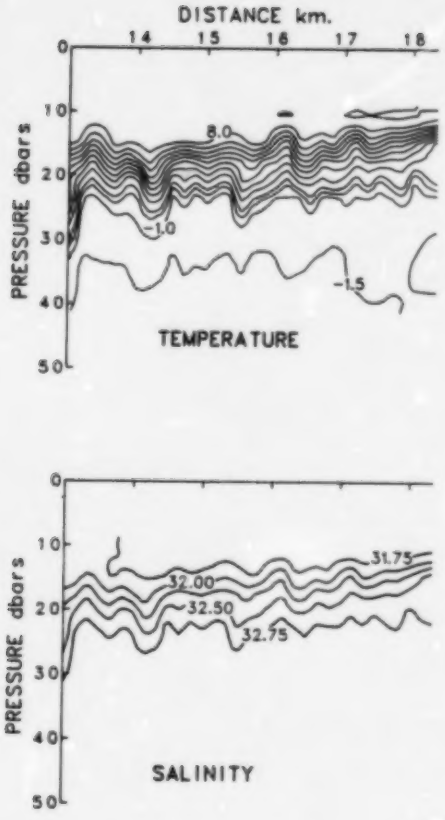

DISTANCE km.
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.50
32.75
SALINITY

Fig. 374

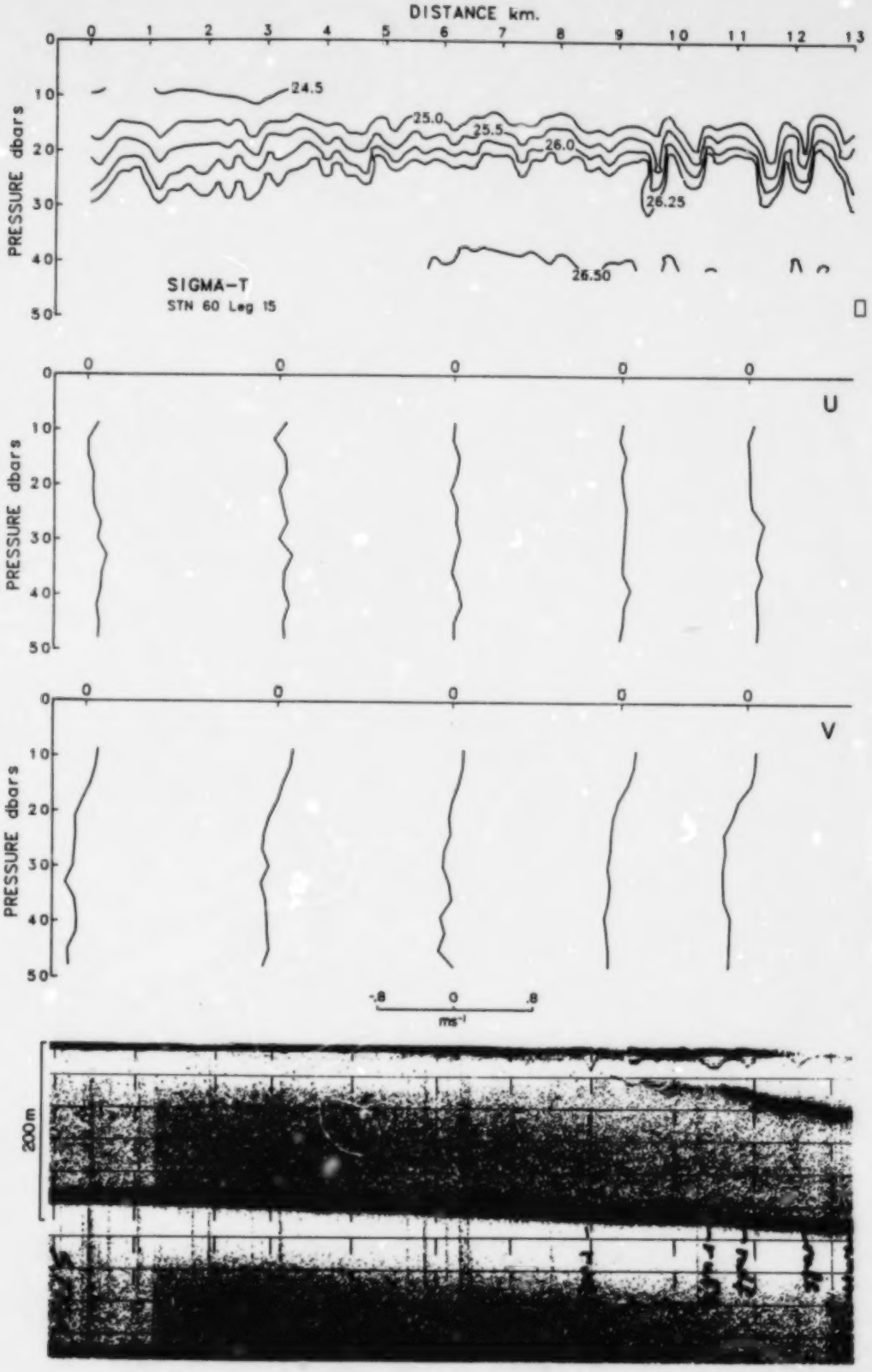

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 15
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 375

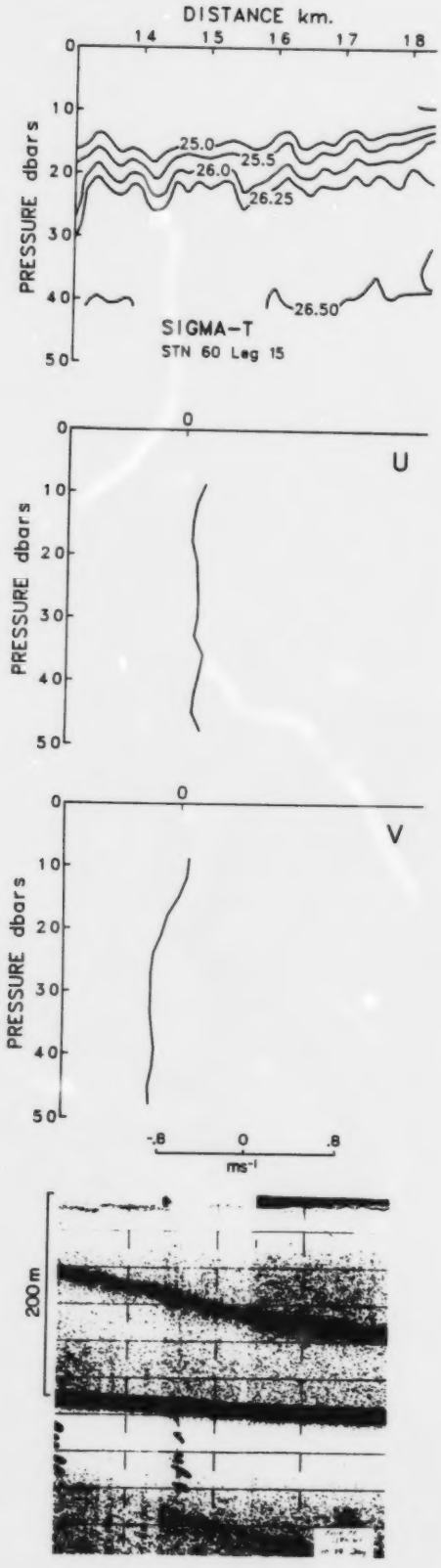

DISTANCE km.
14
15
16
17
18
0
10
20
30
40
50
PRESSURE dbars
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 60 Leg 15
0
U
V
-.8
.8
ms⁻¹
200m

Fig. 376

Figures 377-451

BATFISH station 61; 23 sections of Temperature, Salinity and Sigma-t vs. pressure, profiles of current components U (east) and V (north) from ADCP, location map and ship track plot. Selected legs are accompanied by the 12 kHz sounder record. Due to the length of some of the sections, these have been split into two or more parts. The relative spacing of U and V profiles is correct wrt the Sigma-t section. The first U and V profile is aligned vertically with the origin of the Sigma-t section.

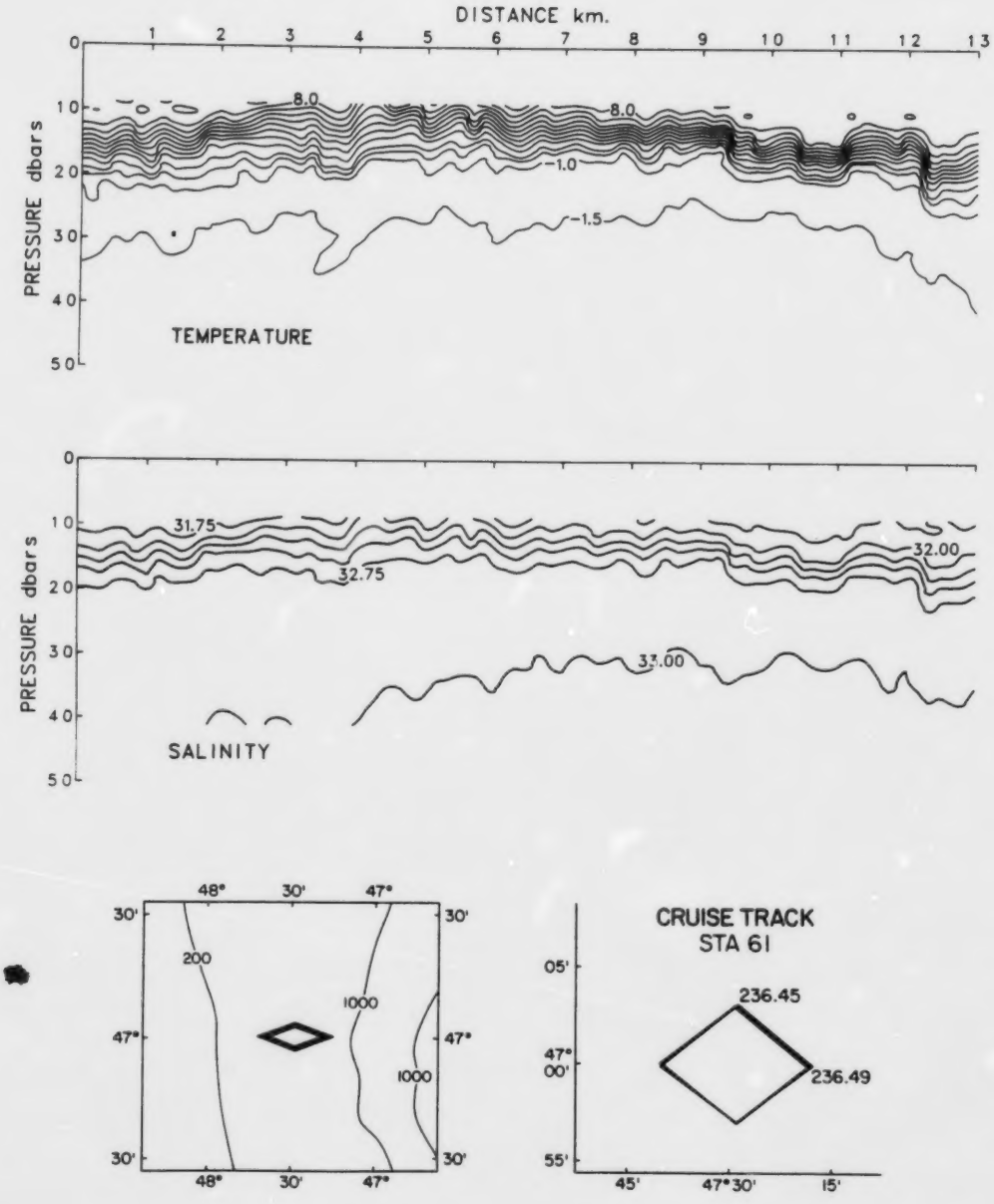

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
32.00
33.00
SALINITY
48°
30'
47°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.45
236.49
45'
47°30'
15'

Fig. 377

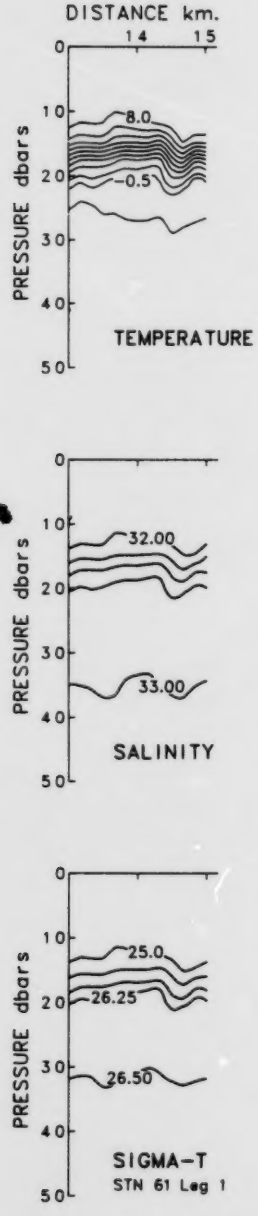

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-0.5
TEMPERATURE
32.00
33.00
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 1

Fig. 378

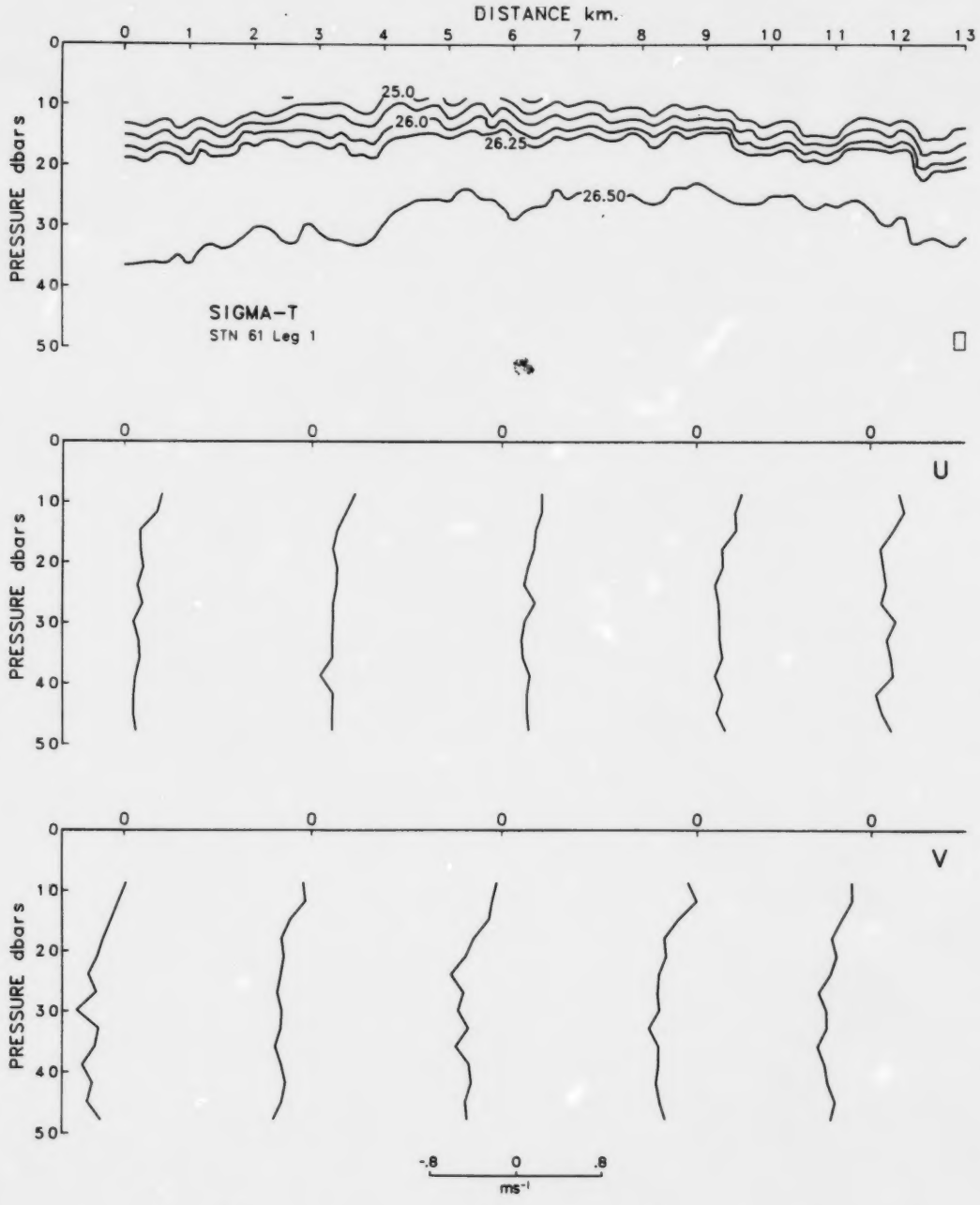

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 1
U
V
-.8 0 .8
ms⁻¹

Fig. 379

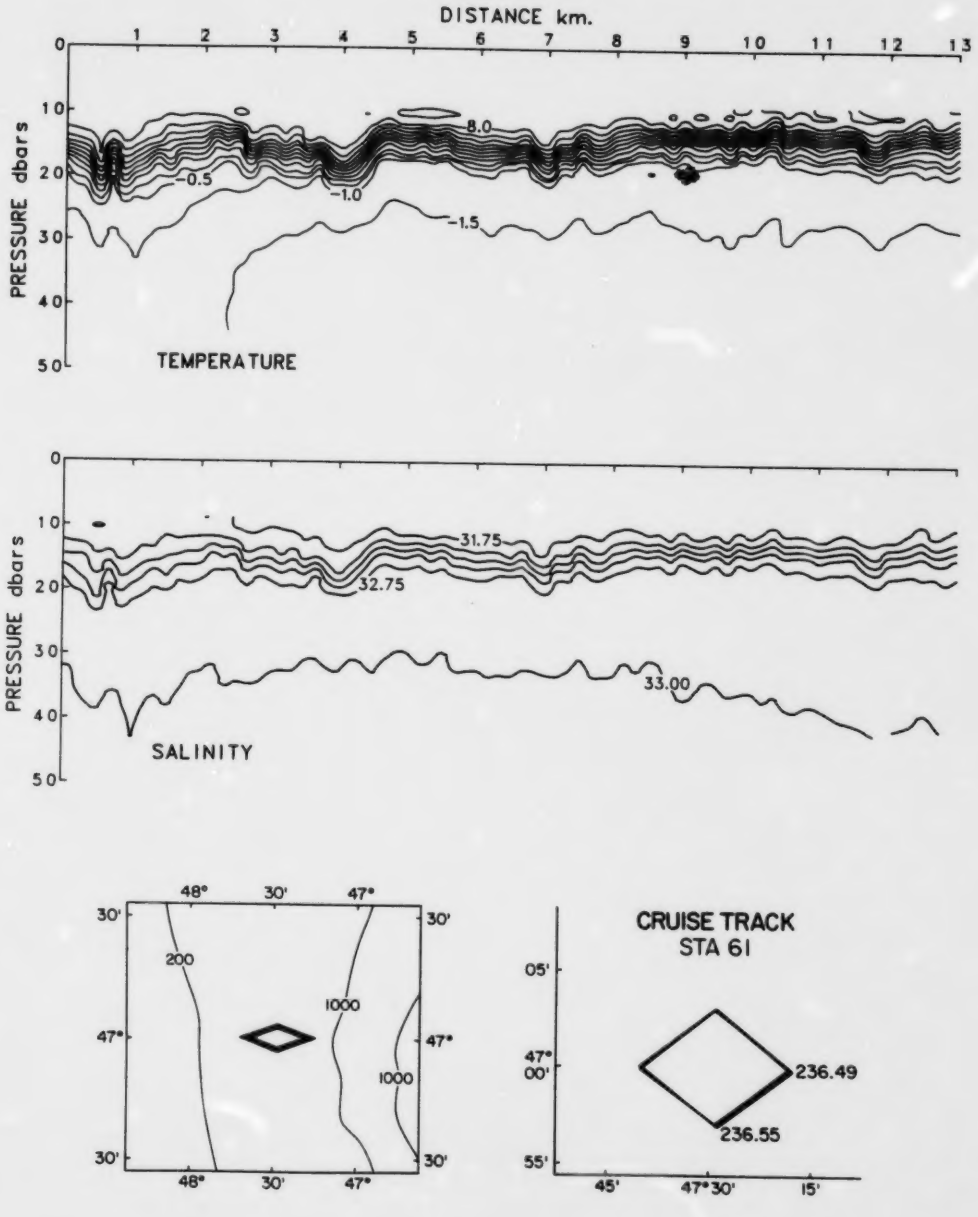

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
-0.5
-1.0
-1.5
8.0
TEMPERATURE
PRESSURE dbars
31.75
32.75
33.00
SALINITY
48°
30'
47°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.49
236.55
45'
47°30'
15'

Fig. 380

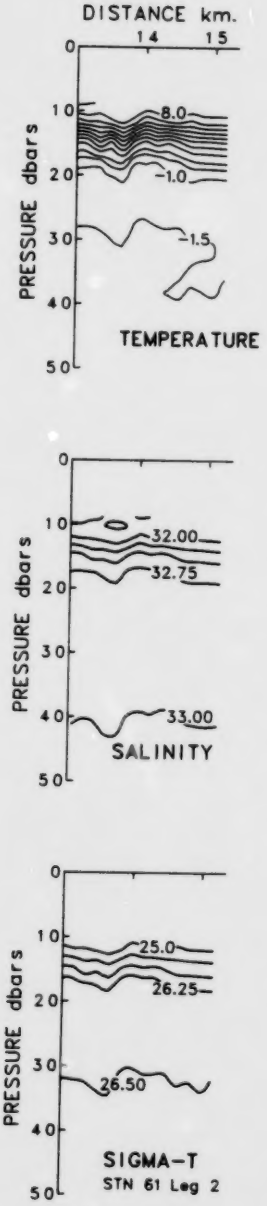

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.75
33.00
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 2

Fig. 381

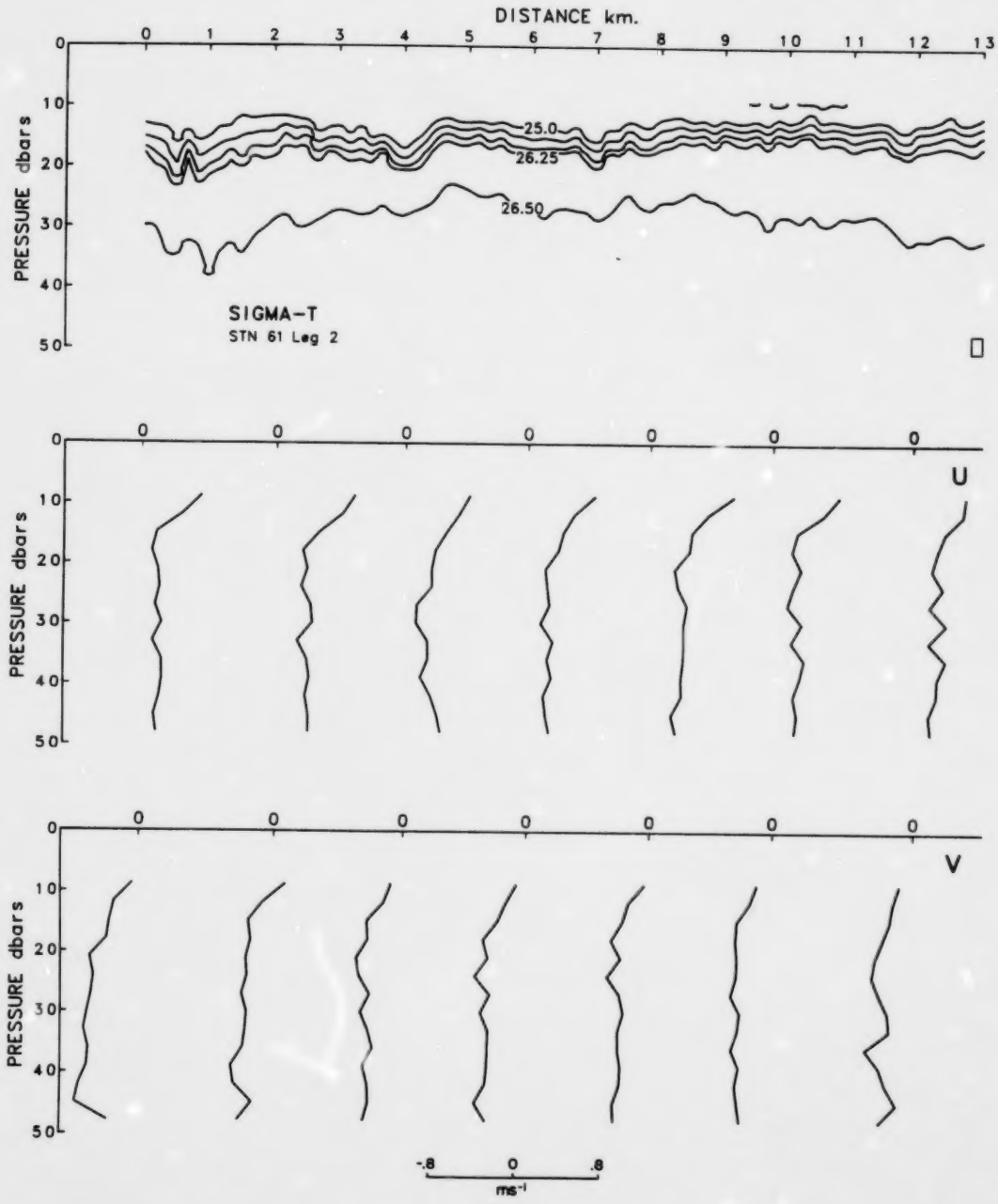

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 2
U
V
0 0 0 0 0 0 0
-.8 0 .8
ms-1

Fig. 382

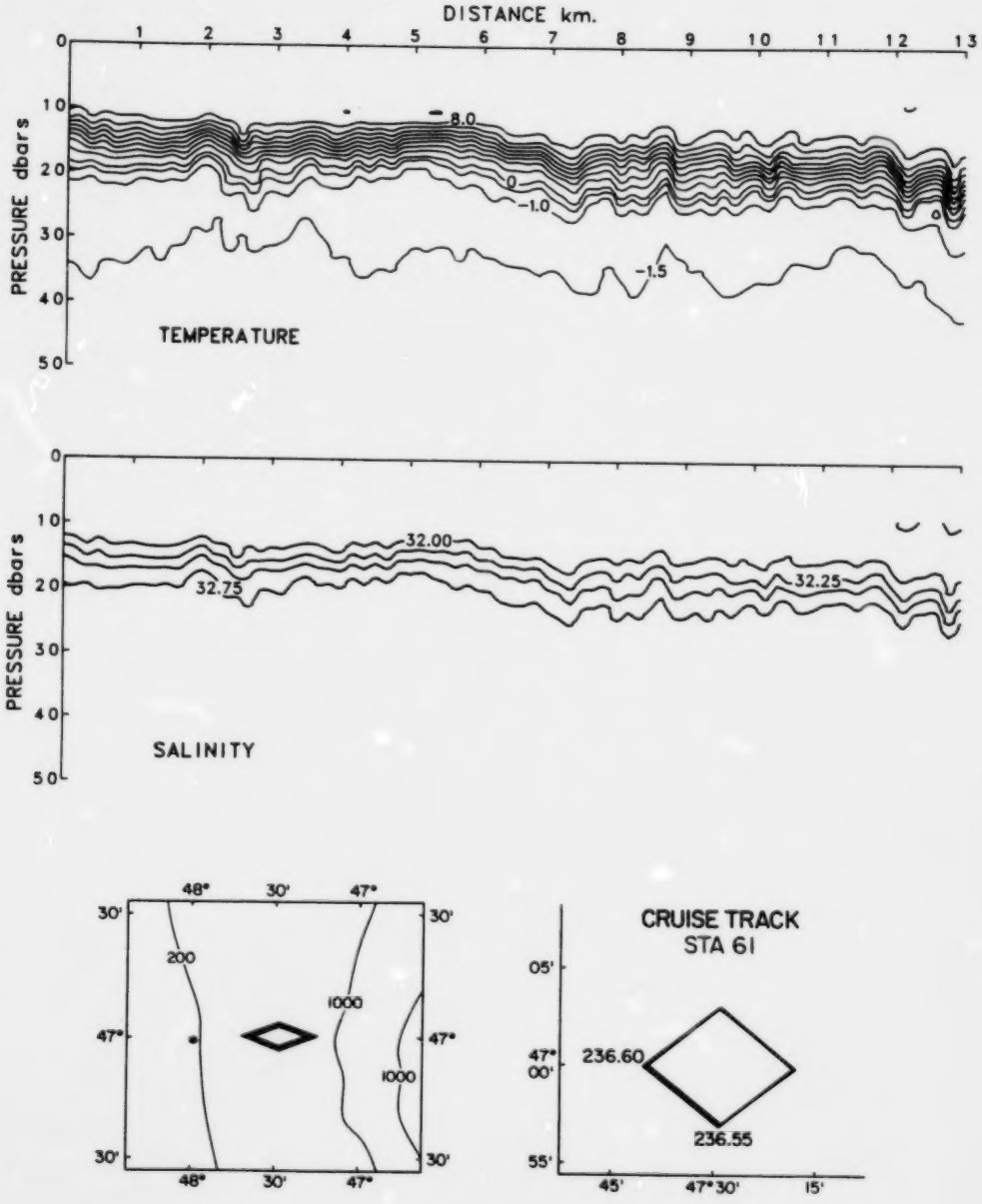

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
8.0
0
-1.0
-1.5
TEMPERATURE
32.00
32.75
32.25
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.60
236.55
45'
47°30'
15'

Fig. 383

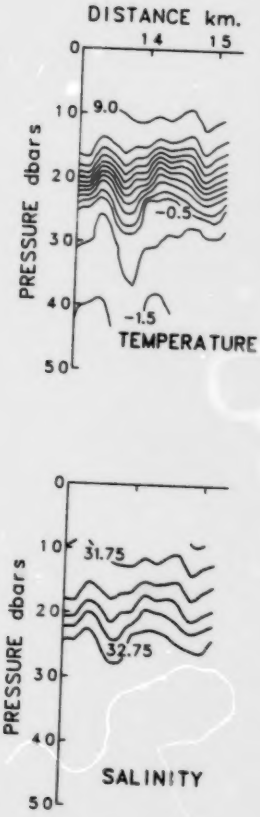

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-0.5
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
31.75
32.75
SALINITY

Fig. 384

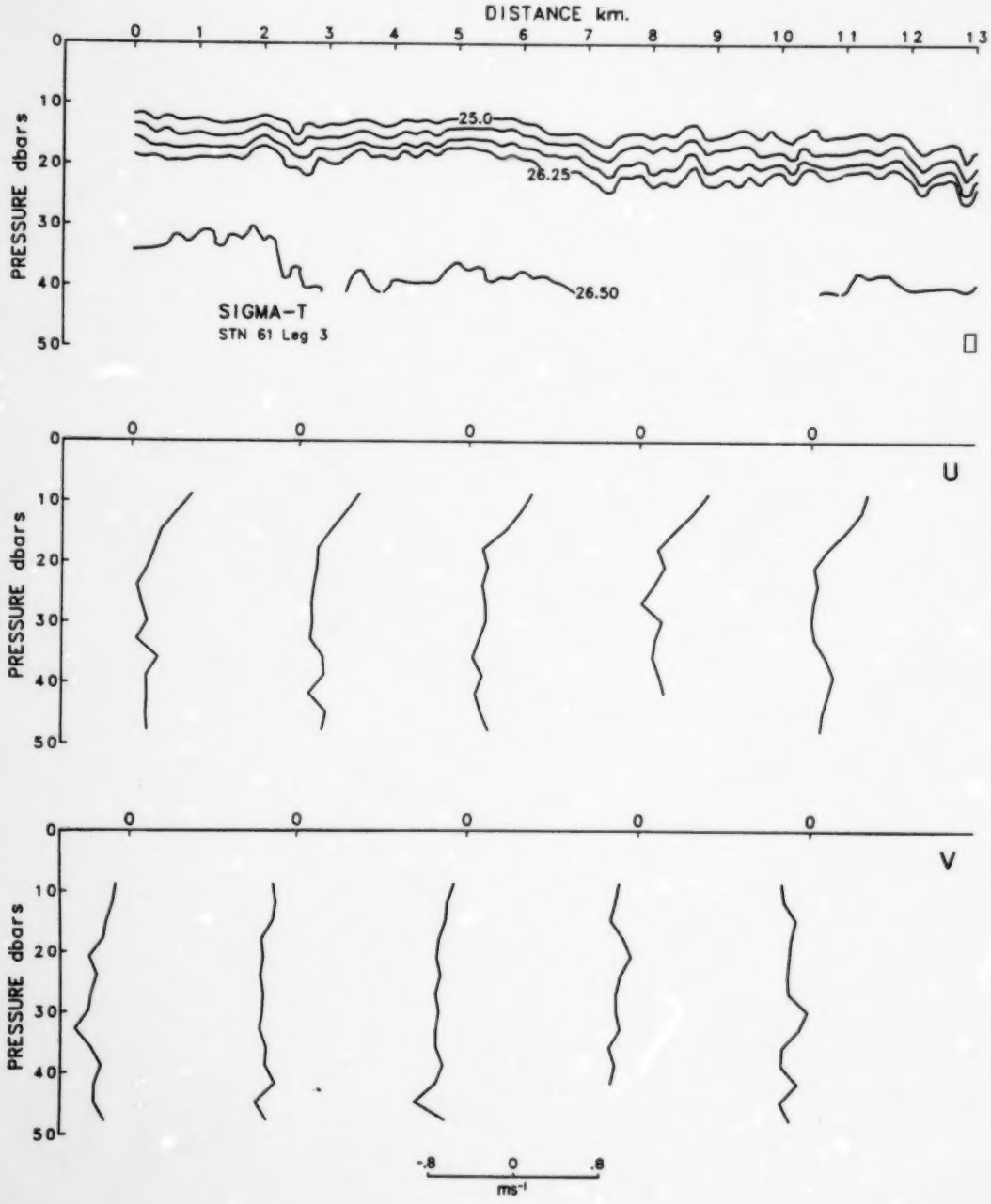

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 3
U
V
-.8 0 .8
ms⁻¹

Fig. 385

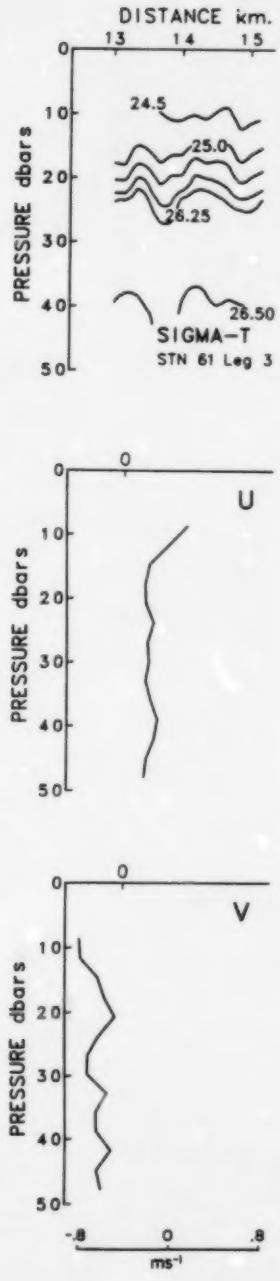
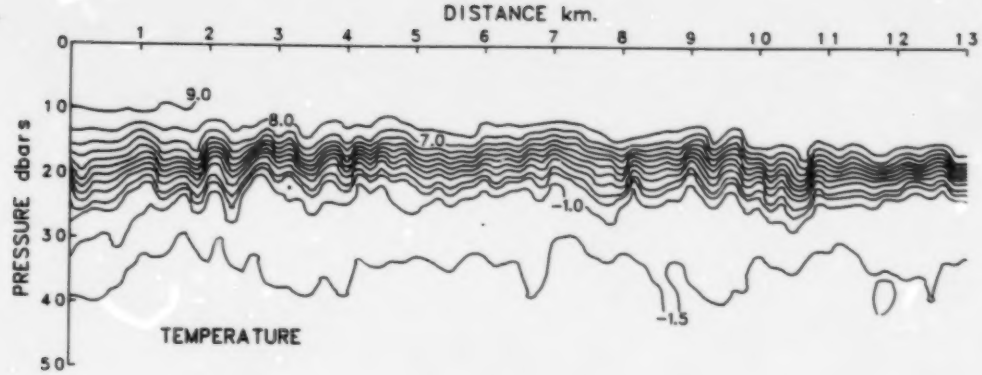
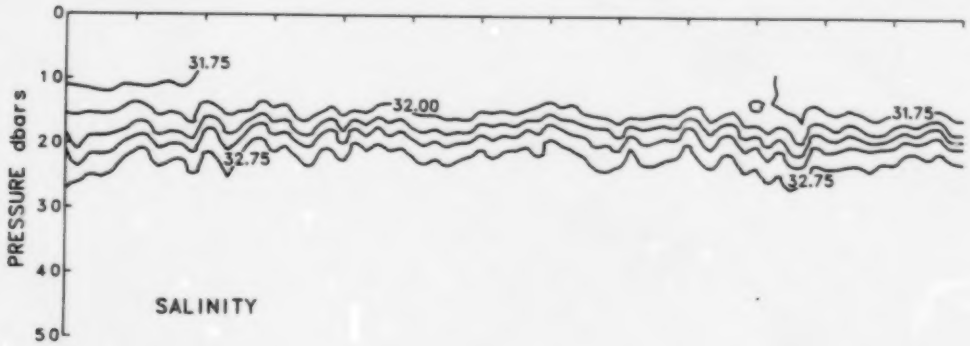
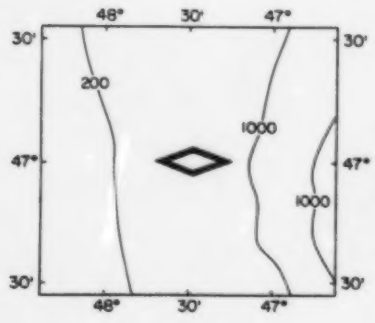

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 3
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 386


DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
7.0
-1.0
-1.5
TEMPERATURE


PRESSURE dbars
0
10
20
30
40
50
31.75
32.00
32.75
31.75
32.75
SALINITY


48°
30'
47°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°
30'

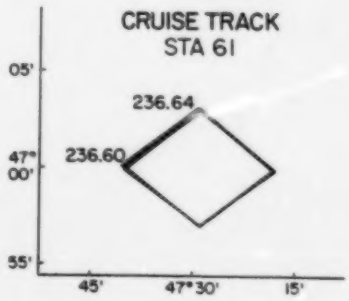

CRUISE TRACK
STA 61
05'
236.64
47°
00'
236.60
55'
45'
47°30'
15'

Fig. 387

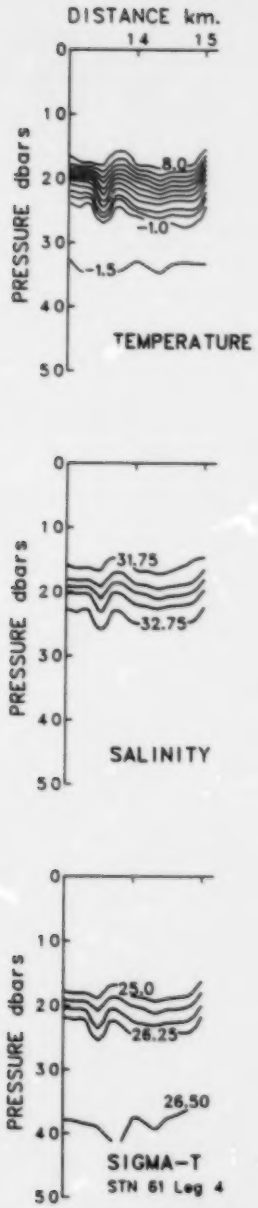

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 4

Fig. 388

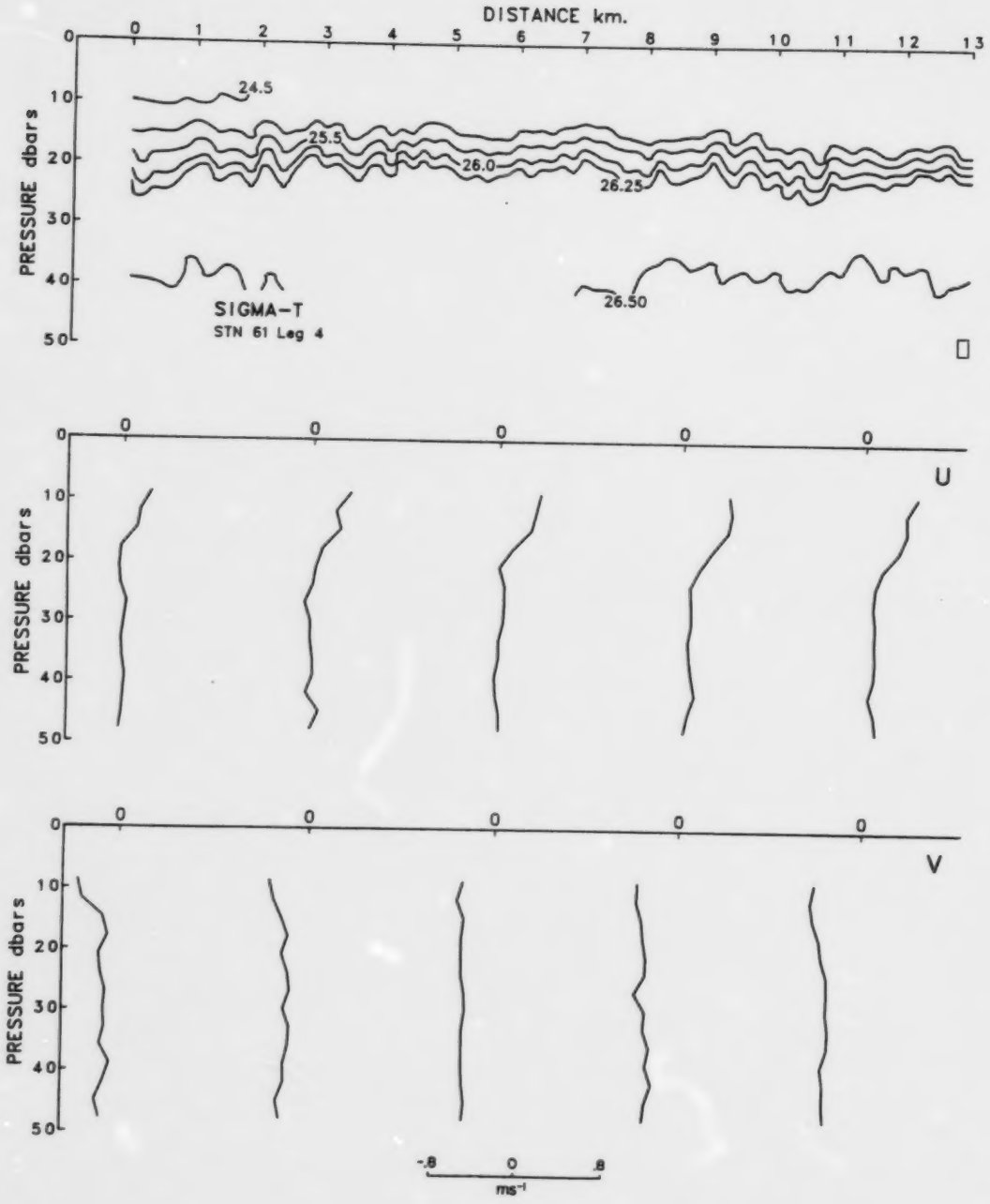

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.5
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 4
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 389

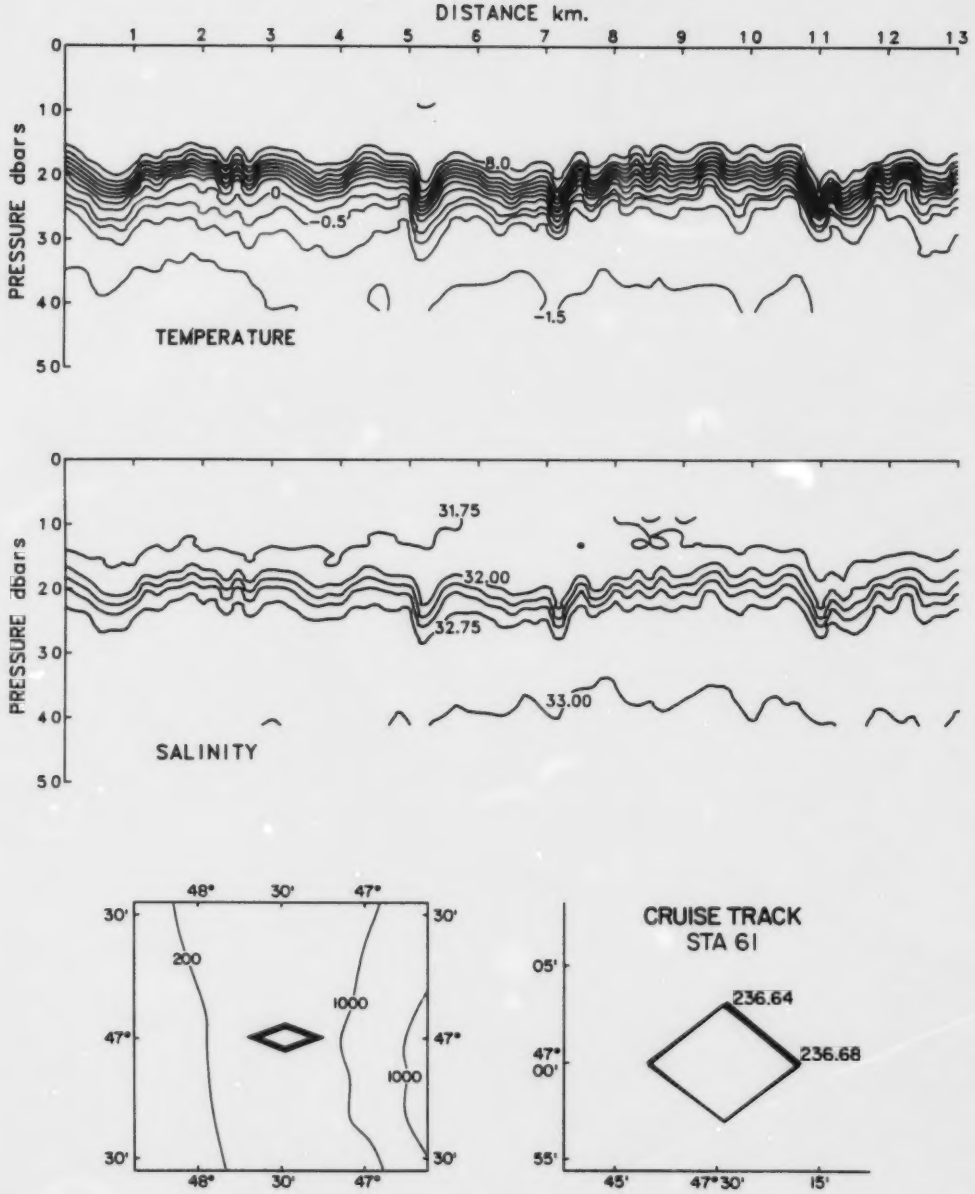

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0 10 20 30 40 50
PRESSURE dbars
8.0
0
-0.5
-1.5
TEMPERATURE
31.75
32.00
32.75
33.00
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47° 00'
55'
236.64
236.68
45' 47°30' 15'

Fig. 390

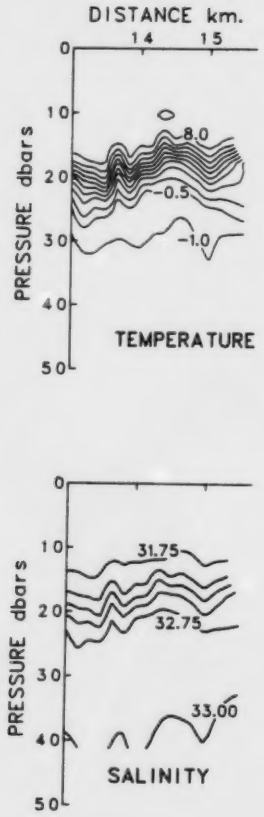

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-0.5
-1.0
TEMPERATURE
31.75
32.75
33.00
SALINITY

Fig. 391

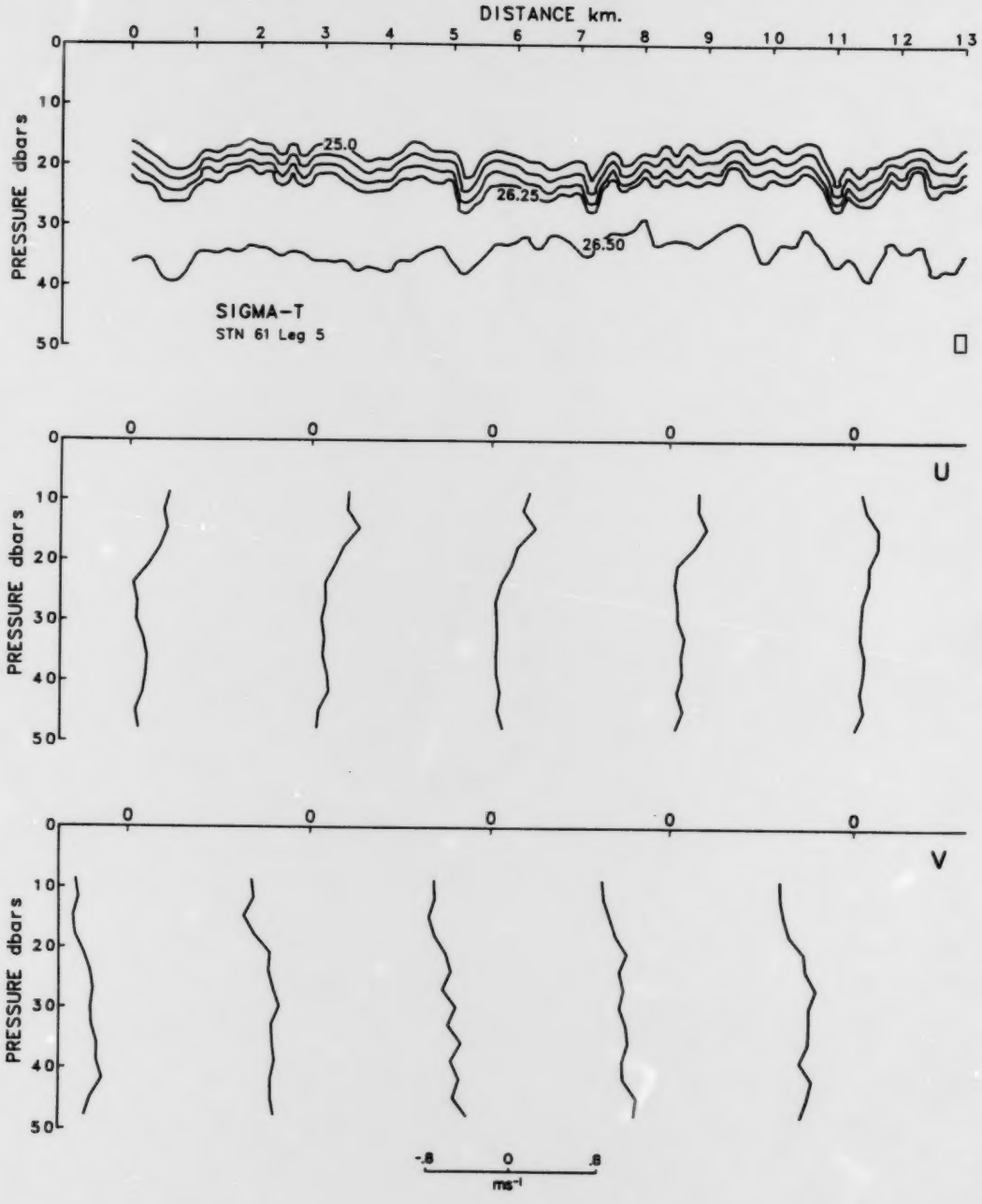

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 5
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 392

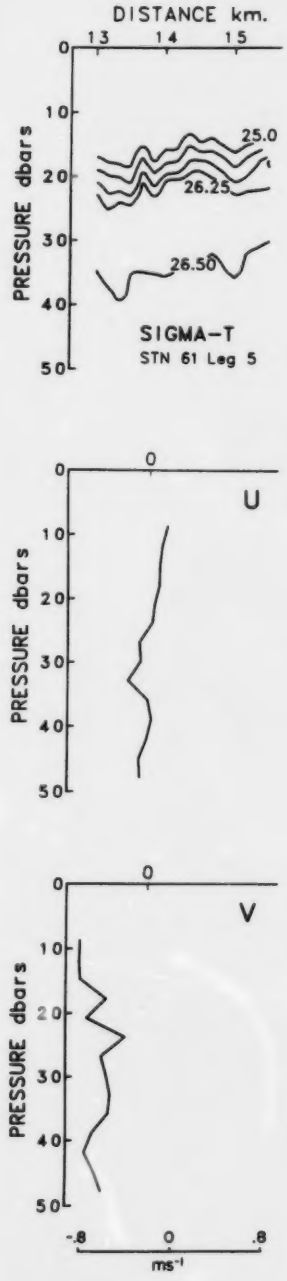

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 5
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 393

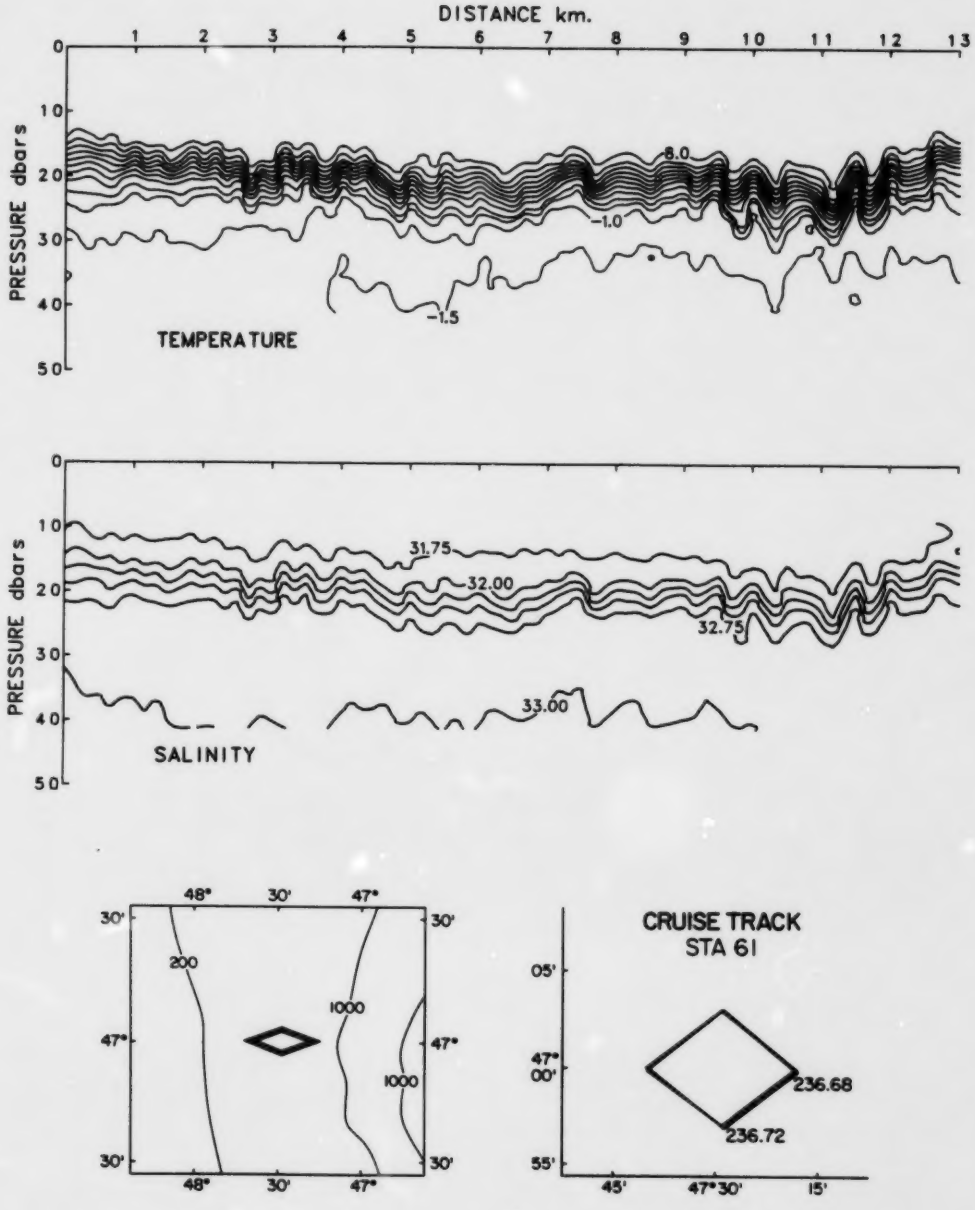

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.68
236.72
45'
47°30'
15'

Fig. 394

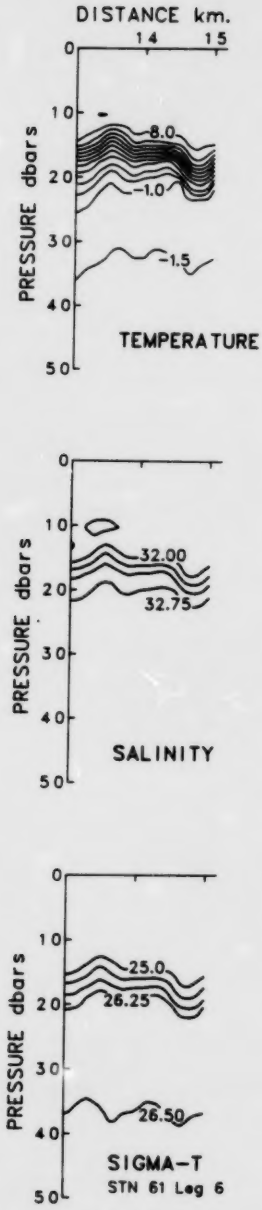

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
8.0
-1.0
-1.5
TEMPERATURE
32.00
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 6

Fig. 395

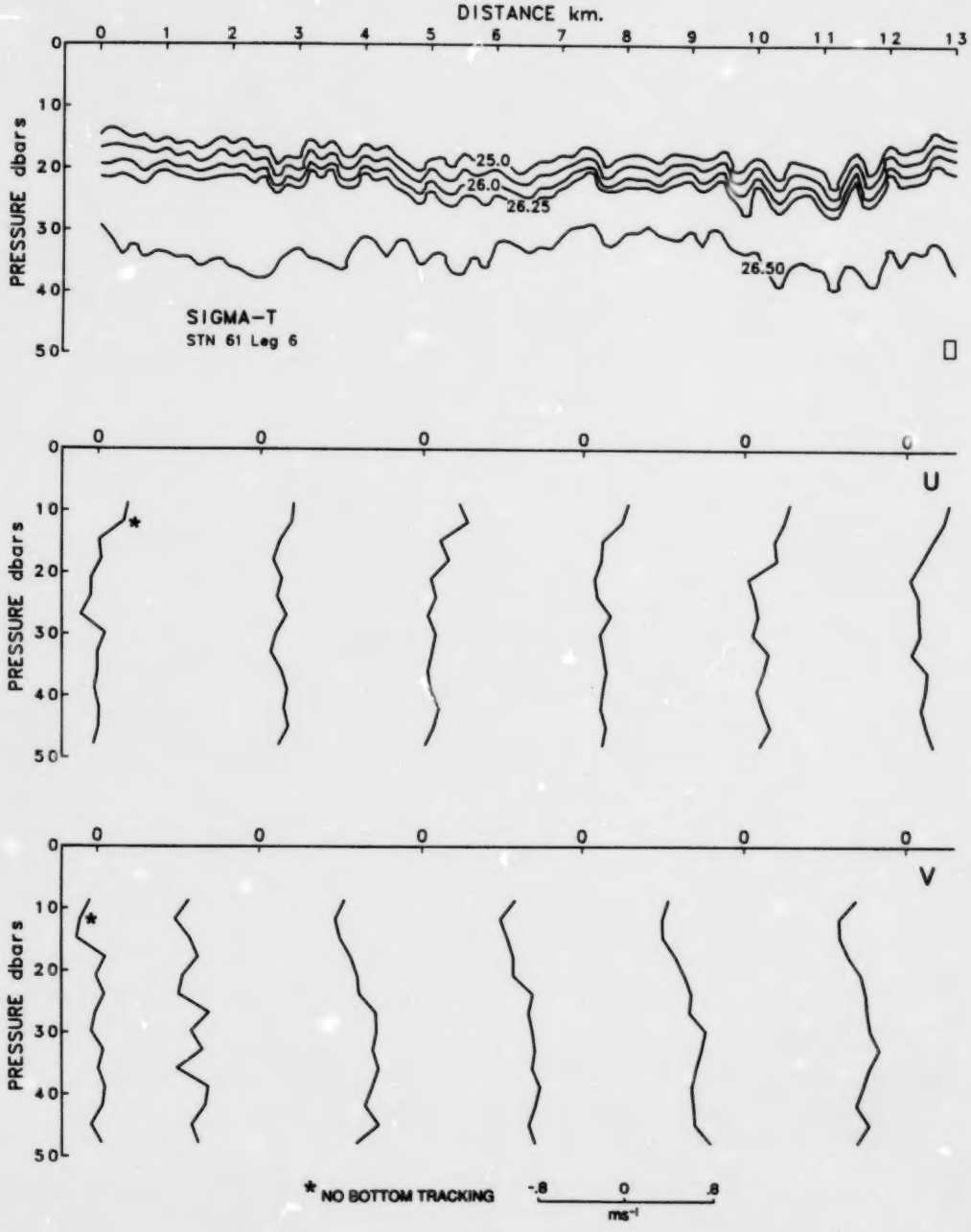

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 6
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 396

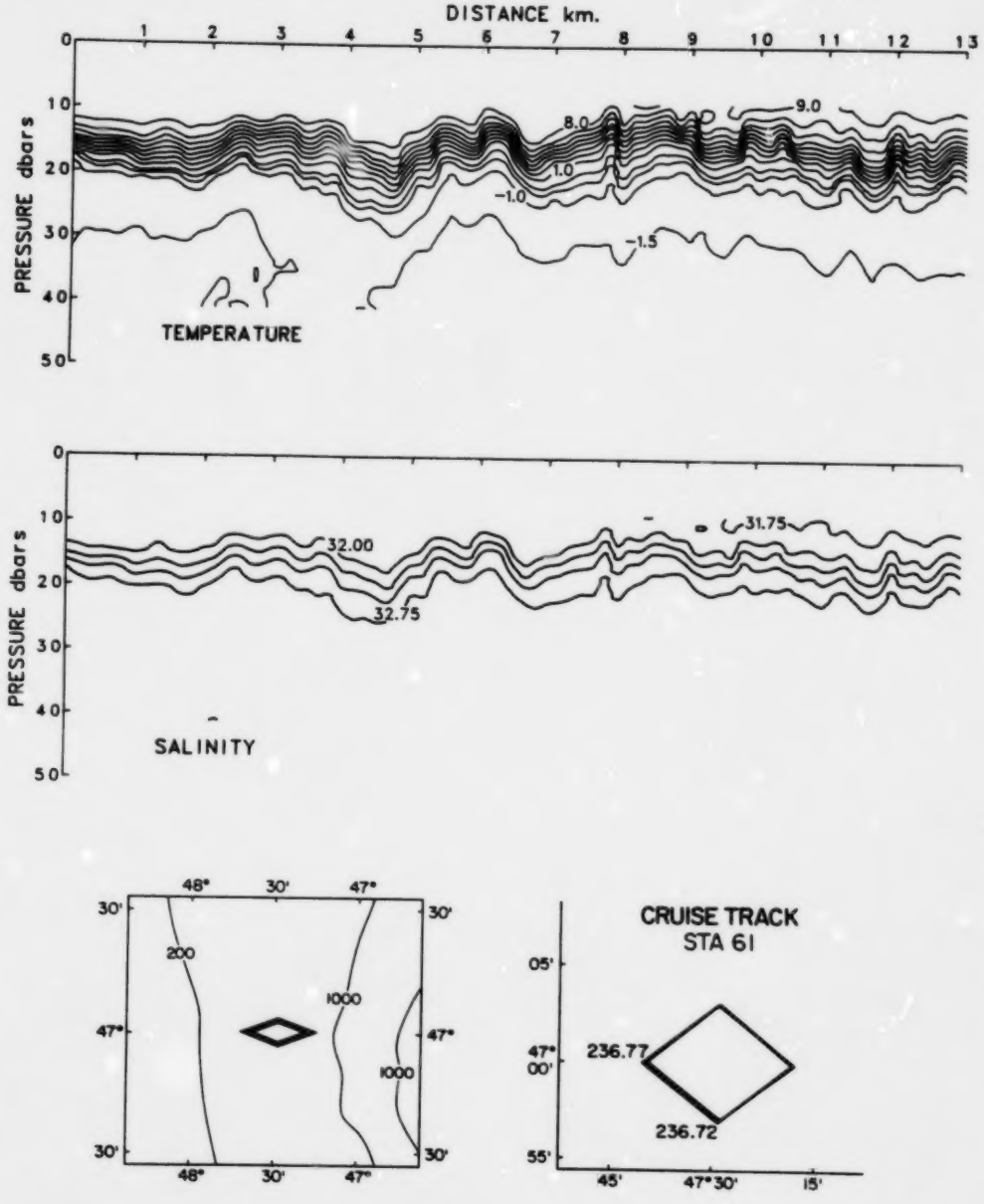

DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
1.0
-1.0
-1.5
TEMPERATURE
32.00
31.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.77
236.72
45'
47°30'
15'

Fig. 397

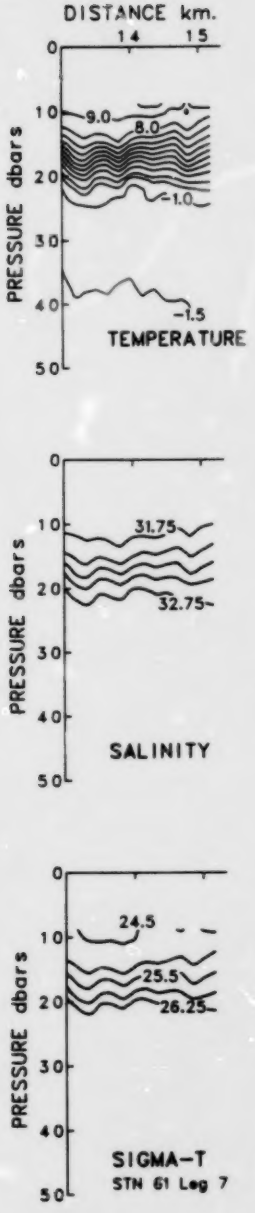

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
24.5
25.5
26.25
SIGMA-T
STN 61 Leg 7

Fig. 398

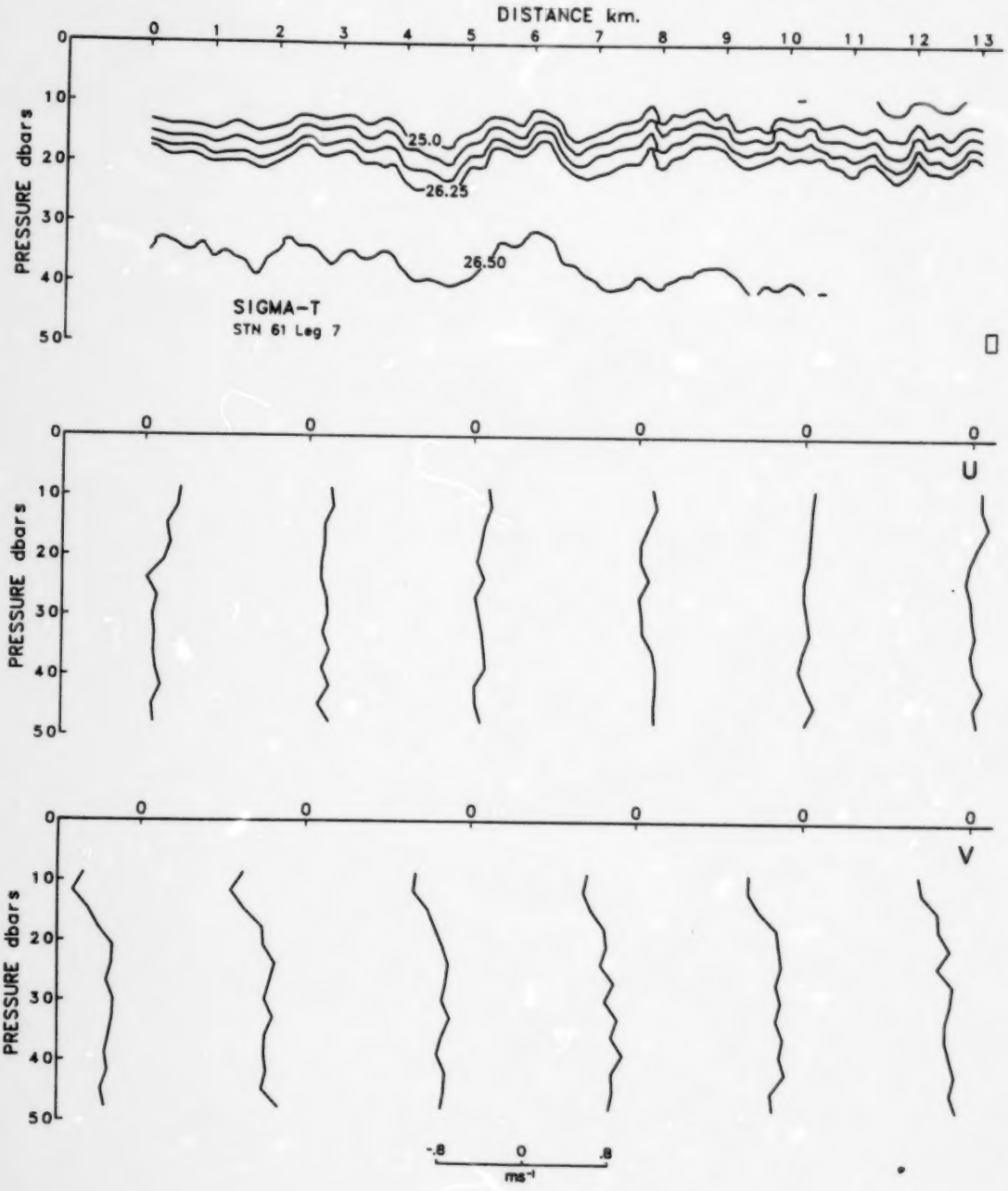

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 7
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 399

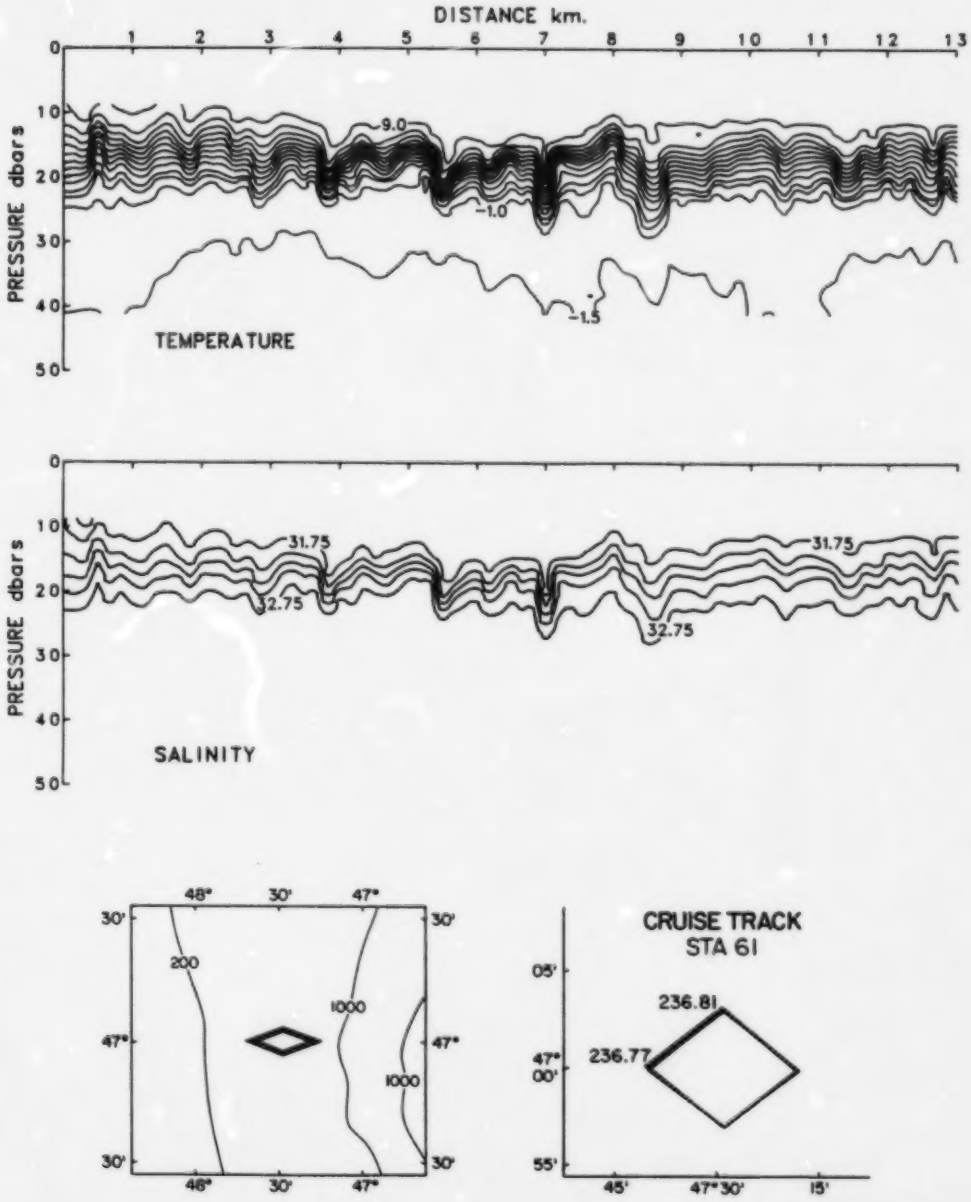

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
31.75
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
236.81
236.77
47° 00'
55'
45'
47°30'
15'

Fig. 400

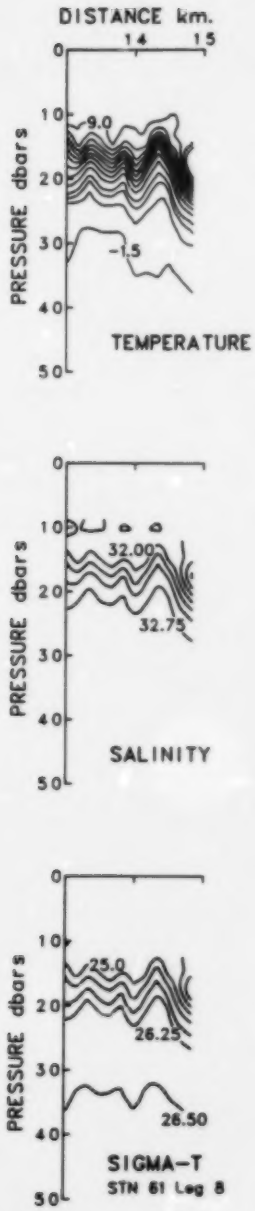

DISTANCE km.
1.4
1.5
0
10
20
30
40
50
PRESSURE dbars
9.0
1.5
TEMPERATURE
32.00
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 8

Fig. 401

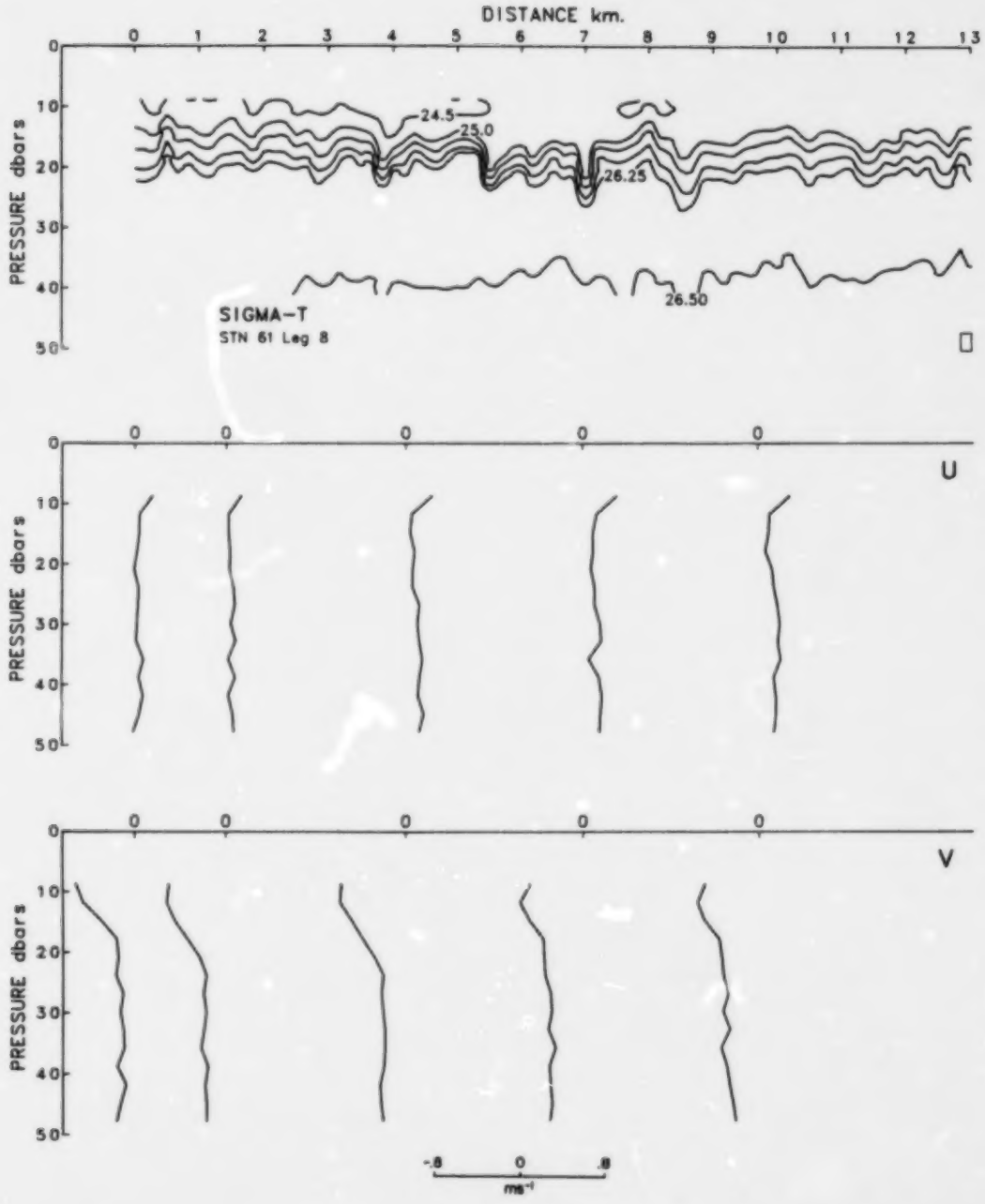

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 8
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 402

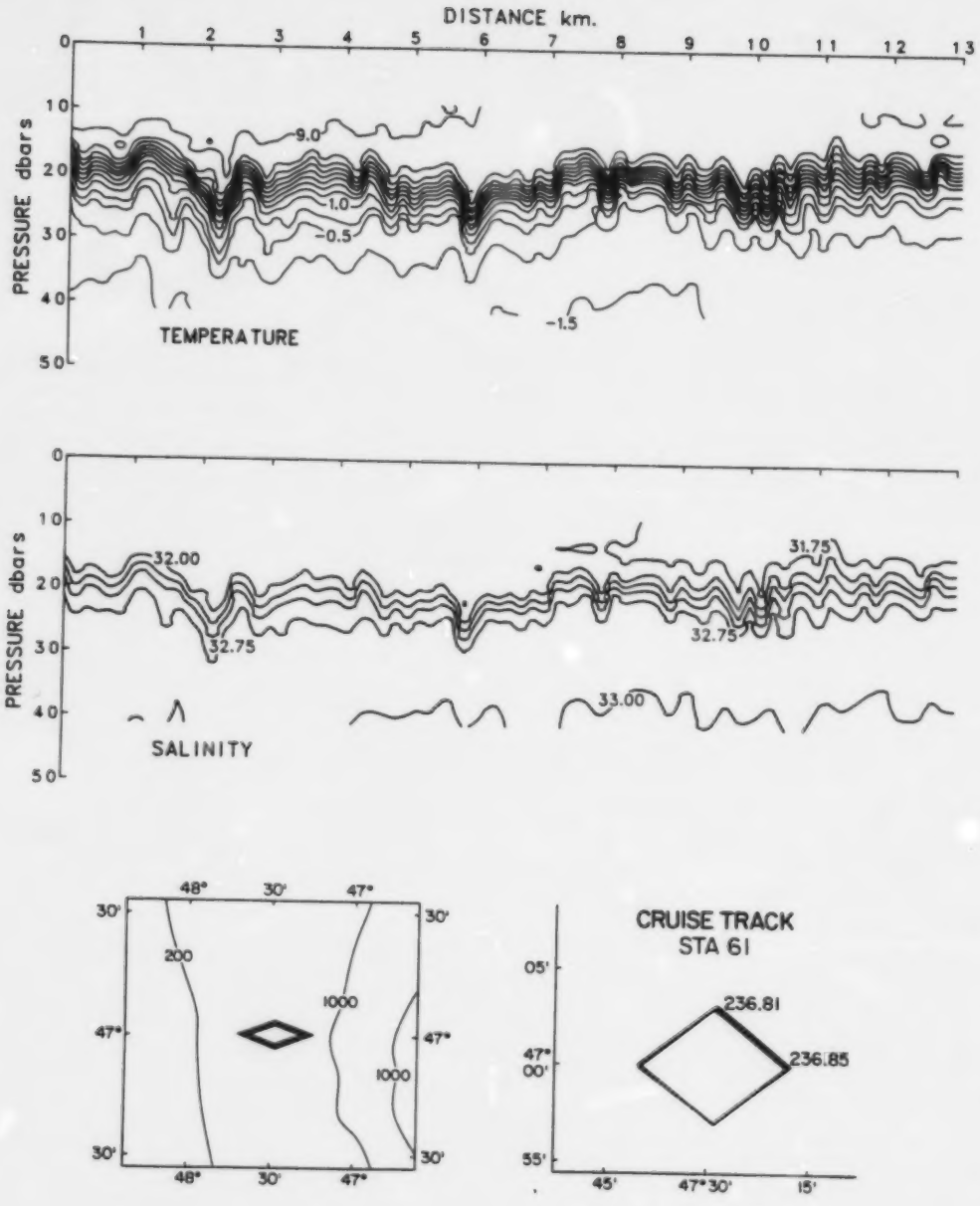

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
1.0
-0.5
-1.5
TEMPERATURE
32.00
32.75
31.75
32.75
33.00
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
236.81
236.85
05'
47° 00'
55'
45'
47°30'
15'

Fig. 403

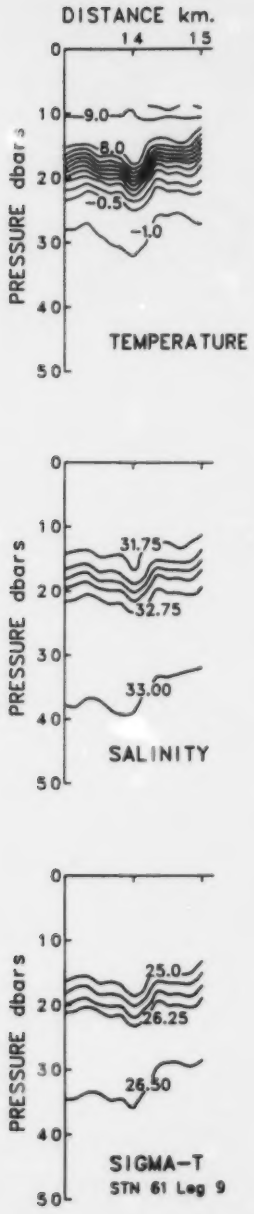

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-0.5
-1.0
TEMPERATURE
31.75
32.75
33.00
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 9

Fig. 404

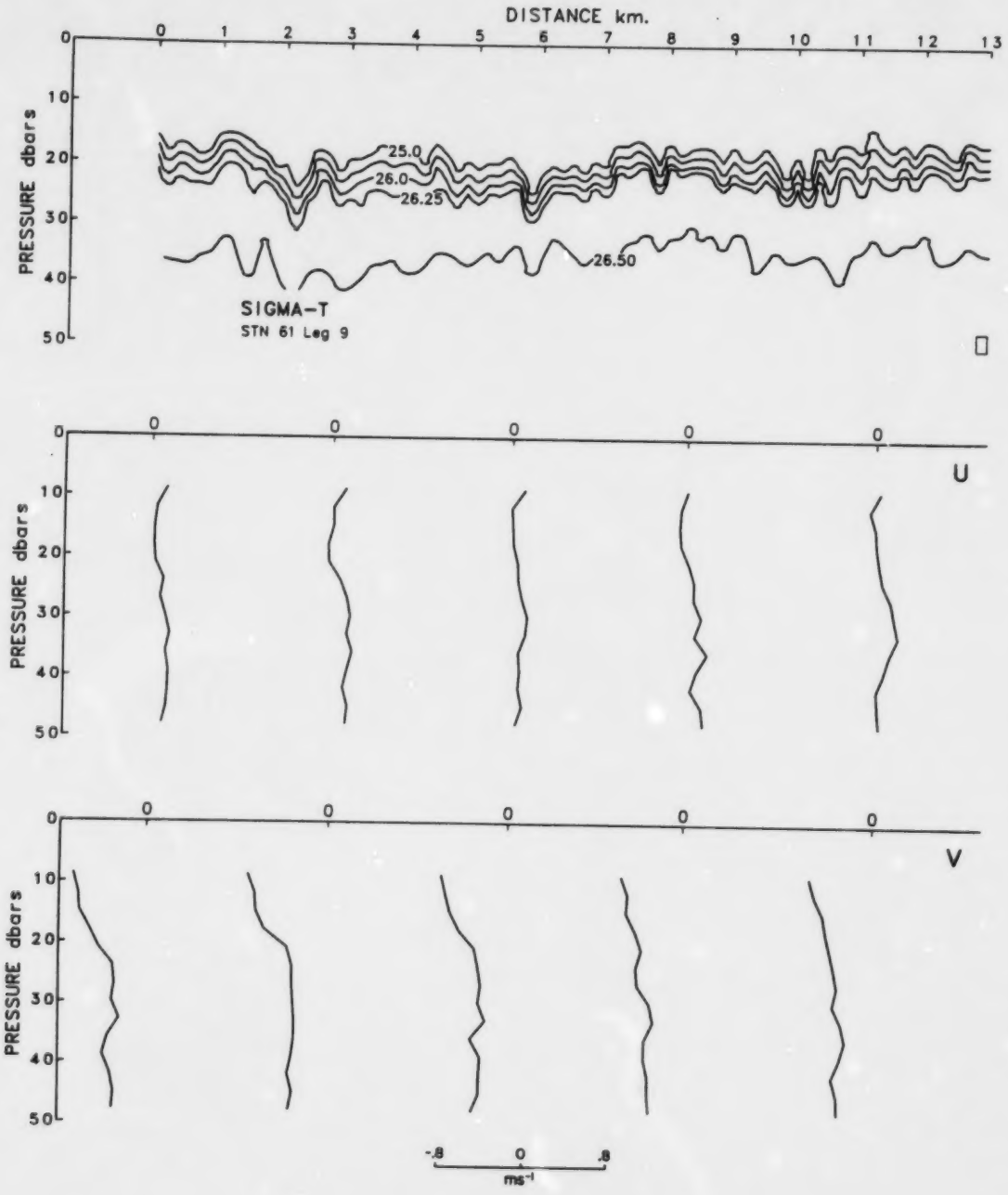

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 9
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 405

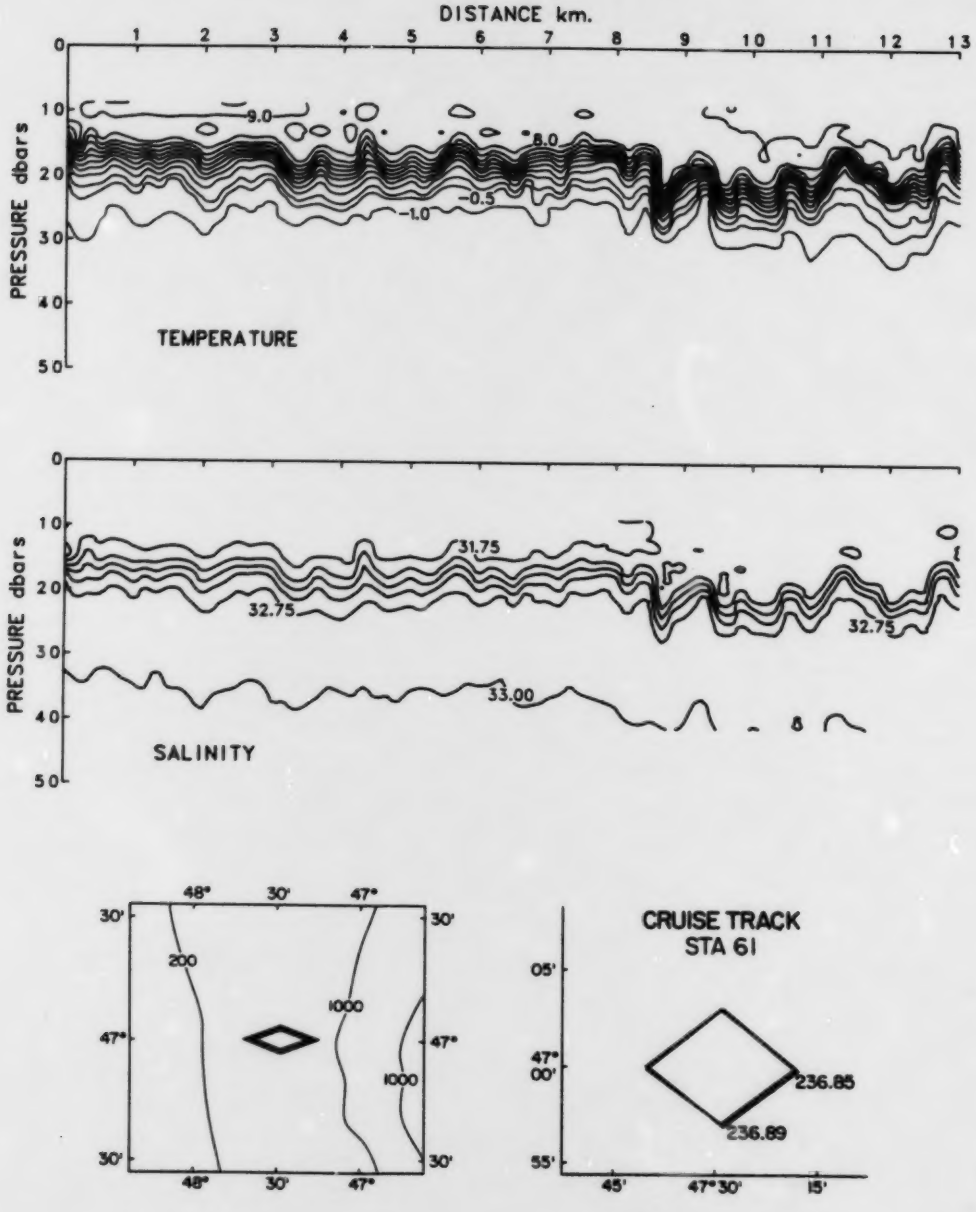

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-0.5
-1.0
TEMPERATURE
31.75
32.75
32.75
33.00
SALINITY
48°
30'
47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.85
236.89
45'
47°30'
15'

Fig. 406

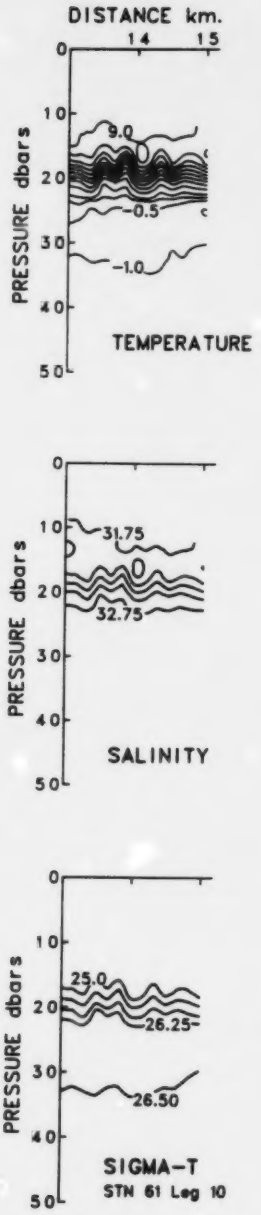

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-0.5
-1.0
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 10

Fig. 407

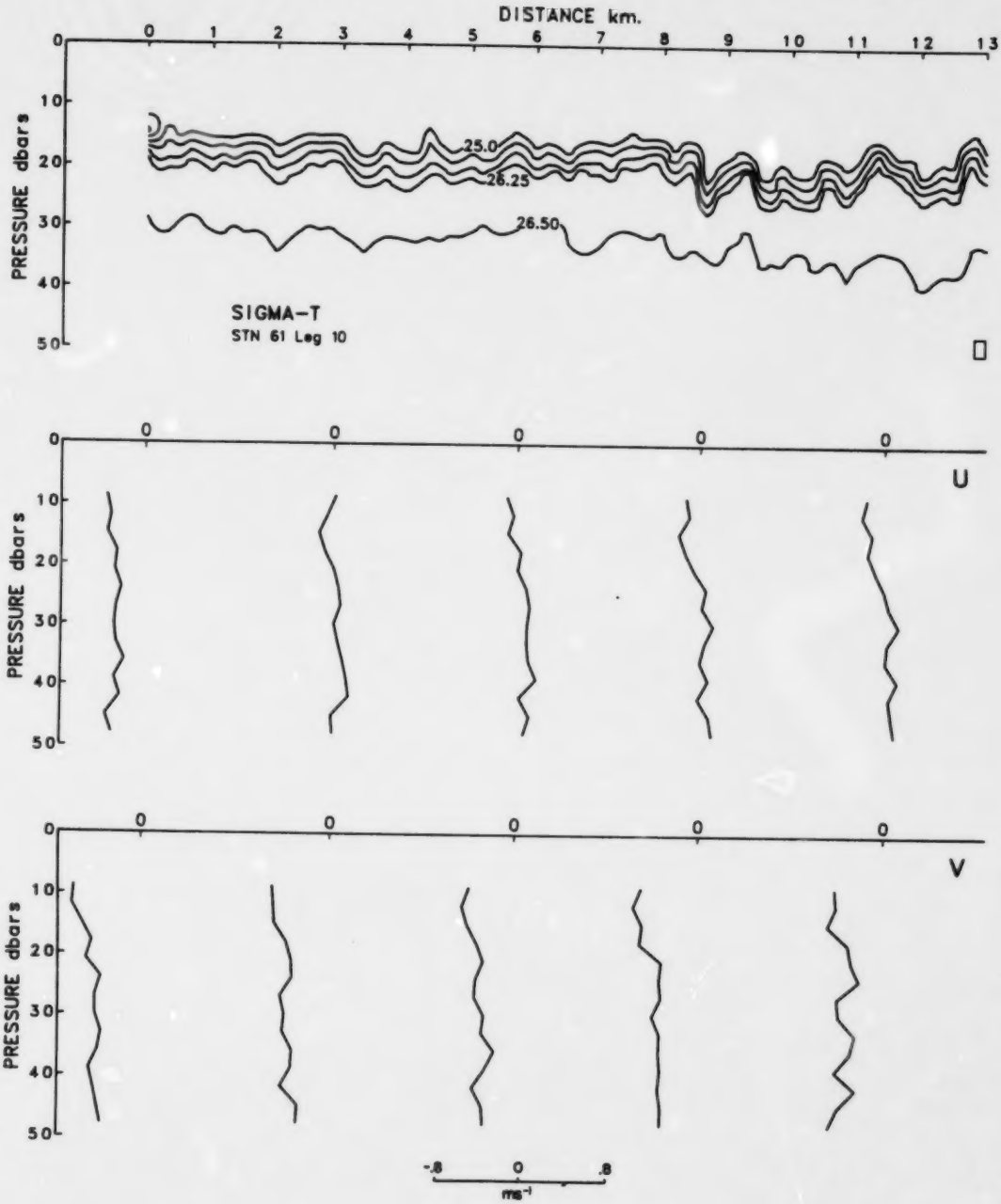
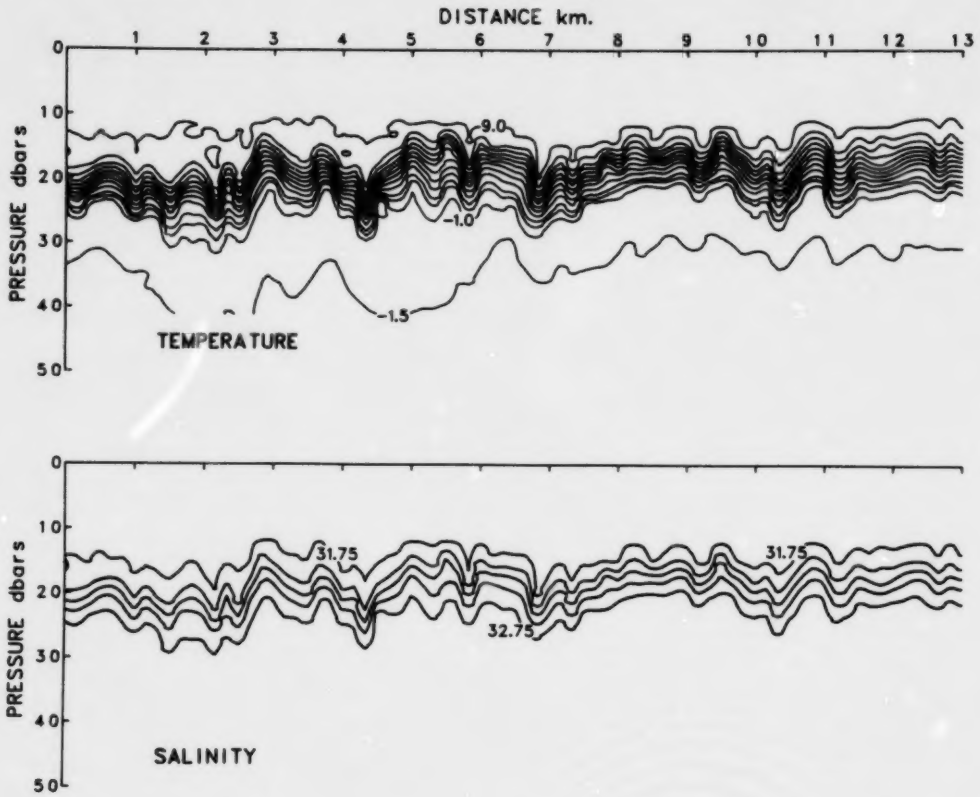

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 10
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 408


DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.75
31.75
32.75
SALINITY

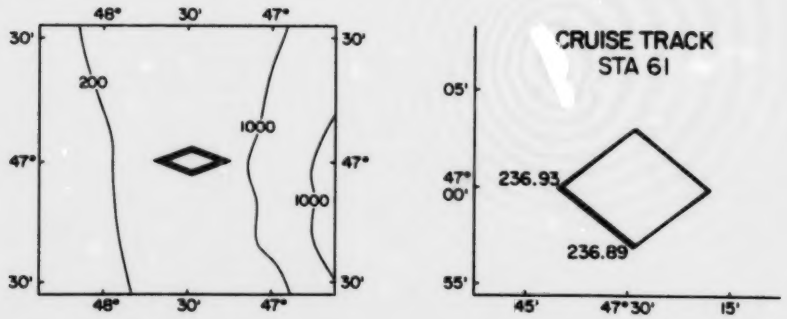

48° 30' 47°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47° 00'
236.93
236.89
55'
45' 47°30' 15'

Fig. 409

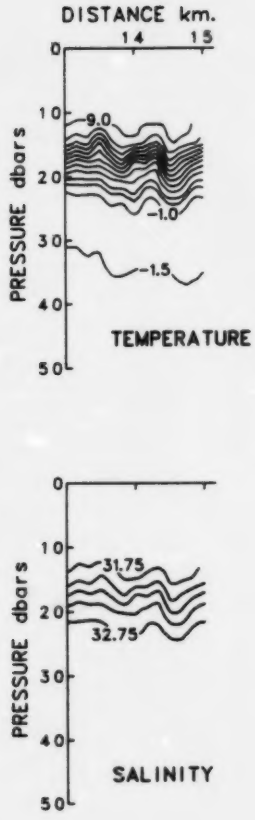

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
31.75
32.75
SALINITY

Fig. 410

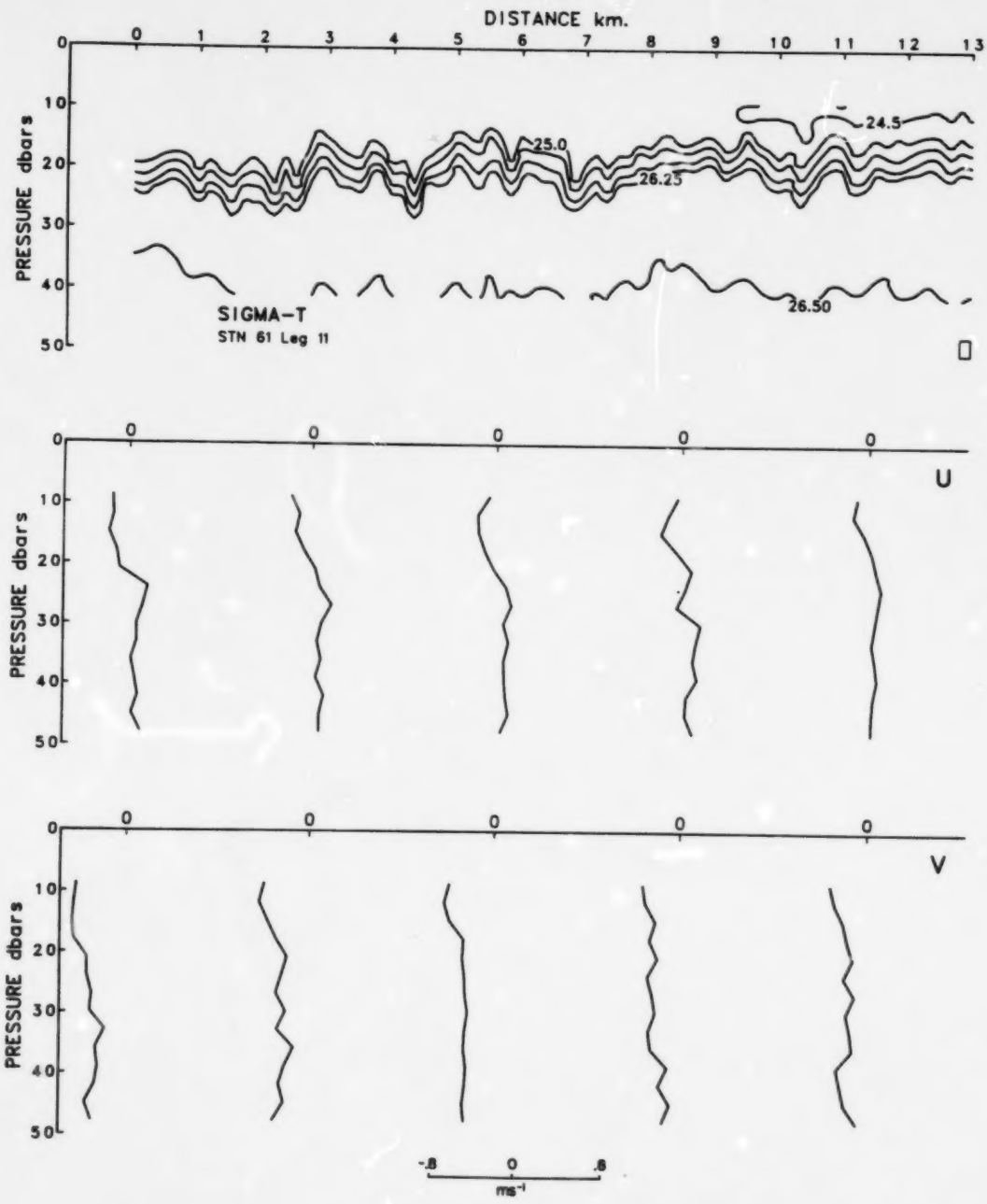

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
24.5
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 11
U
V
-.8 0 .8
ms⁻¹

Fig. 411

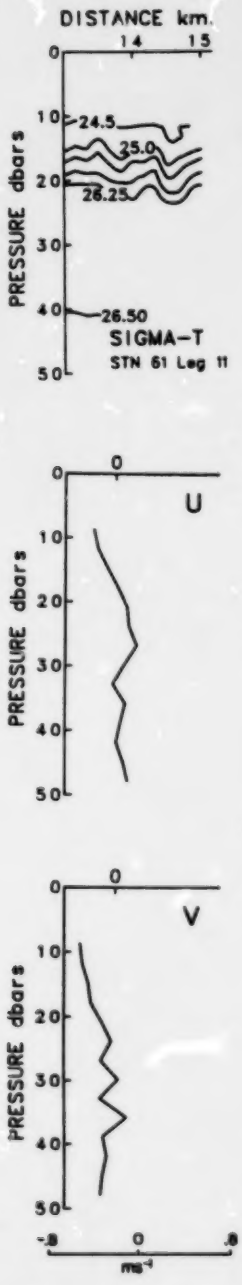
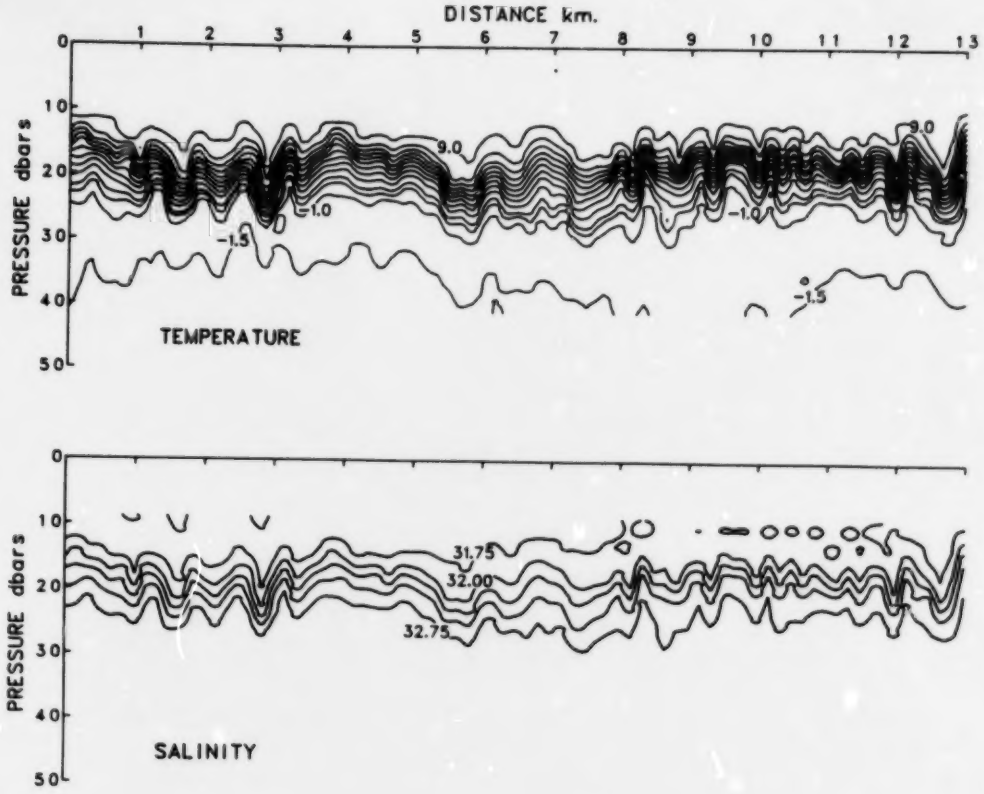

DISTANCE km.
14
15
0
10
20
30
40
50
24.5
25.0
26.25
26.50
PRESSURE dbars
SIGMA-T
STN 61 Leg II
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 412


DISTANCE km.
0
1
2
3
4
5
6
7
8
9
10
11
12
13
PRESSURE dbars
10
20
30
40
50
9.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.75
SALINITY

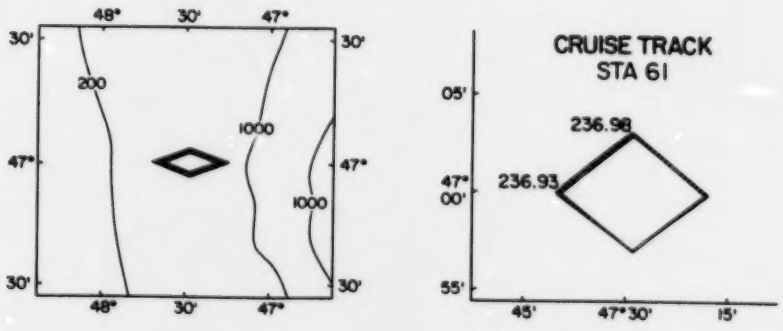

48°
30'
47°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
55'
236.98
236.93
45'
47°30'
15'

Fig. 413

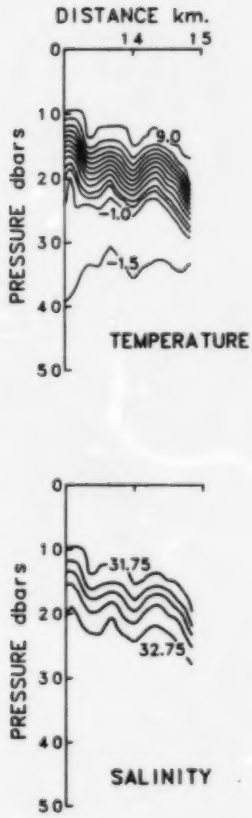

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
31.75
32.75
SALINITY

Fig. 414

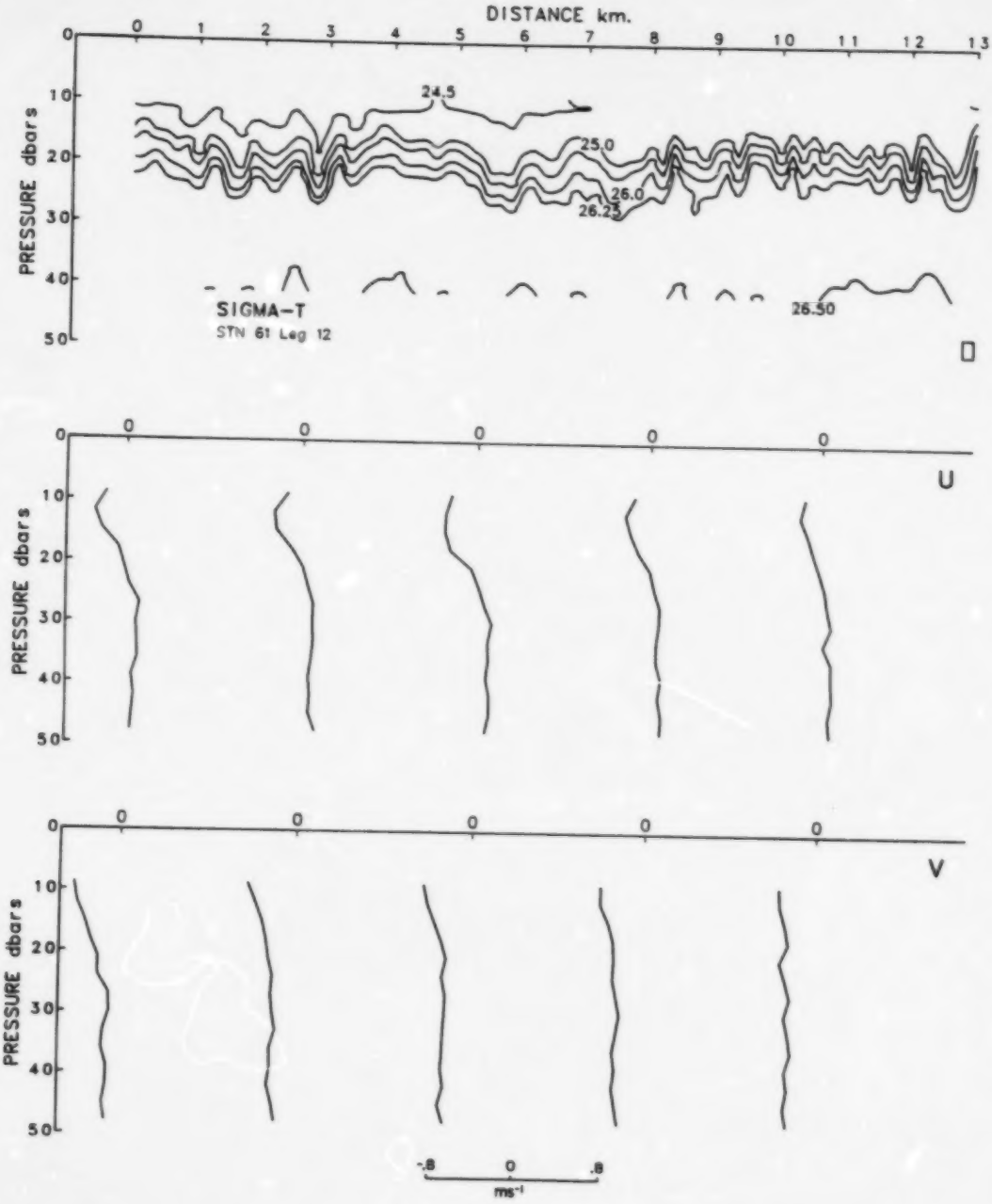

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
26.0
26.25
SIGMA-T
STN 61 Leg 12
26.50
U
V
-.8 0 .8
ms⁻¹

Fig. 415

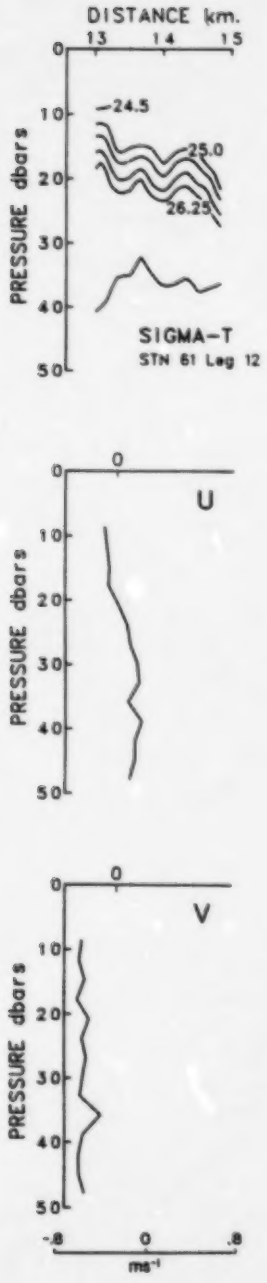

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
-24.5
25.0
26.25
SIGMA-T
STN 61 Leg 12
0
U
V
-.8
.8
ms⁻¹

Fig. 416

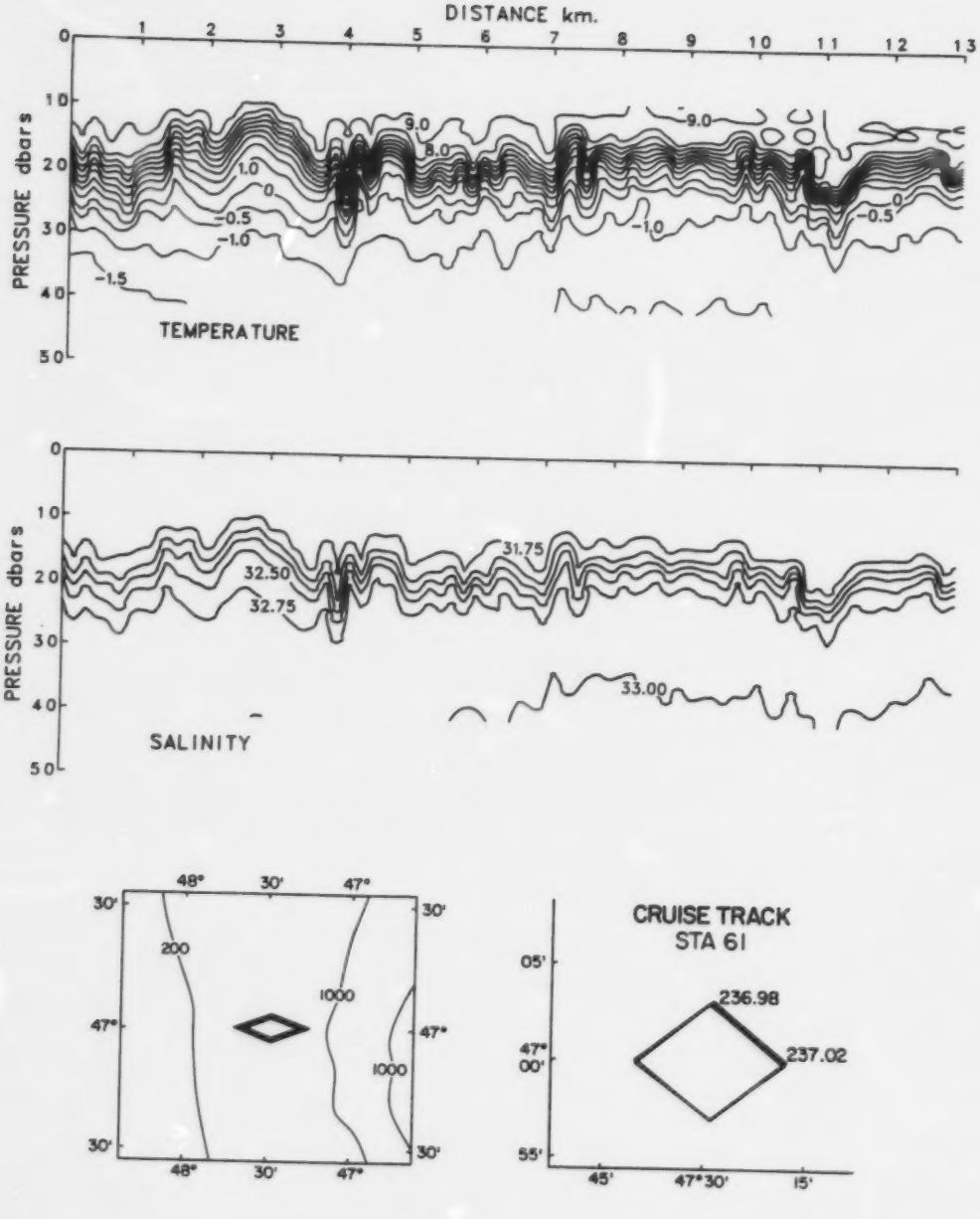

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
9.0
8.0
1.0
0
-0.5
-1.0
-1.5
TEMPERATURE
31.75
32.50
32.75
33.00
SALINITY
48° 30' 47°
30'
47°
200
1000
CRUISE TRACK
STA 61
236.98
237.02
05'
47° 00'
55'
45'
47°30'
15'

Fig. 417

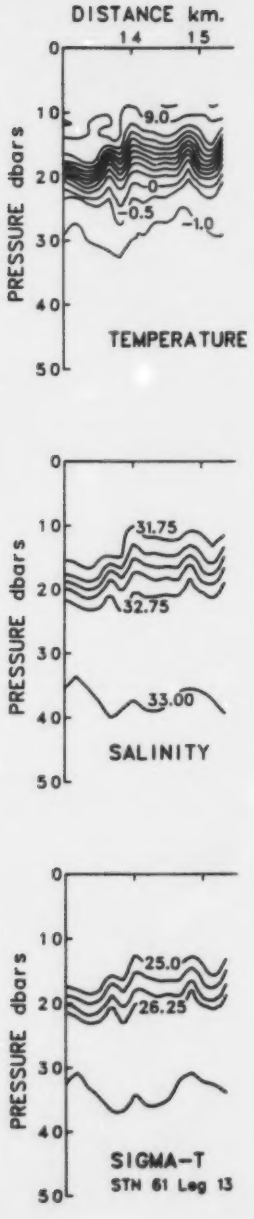

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
0
-0.5
-1.0
TEMPERATURE
31.75
32.75
33.00
SALINITY
25.0
26.25
SIGMA-T
STN 61 Leg 13

Fig. 418

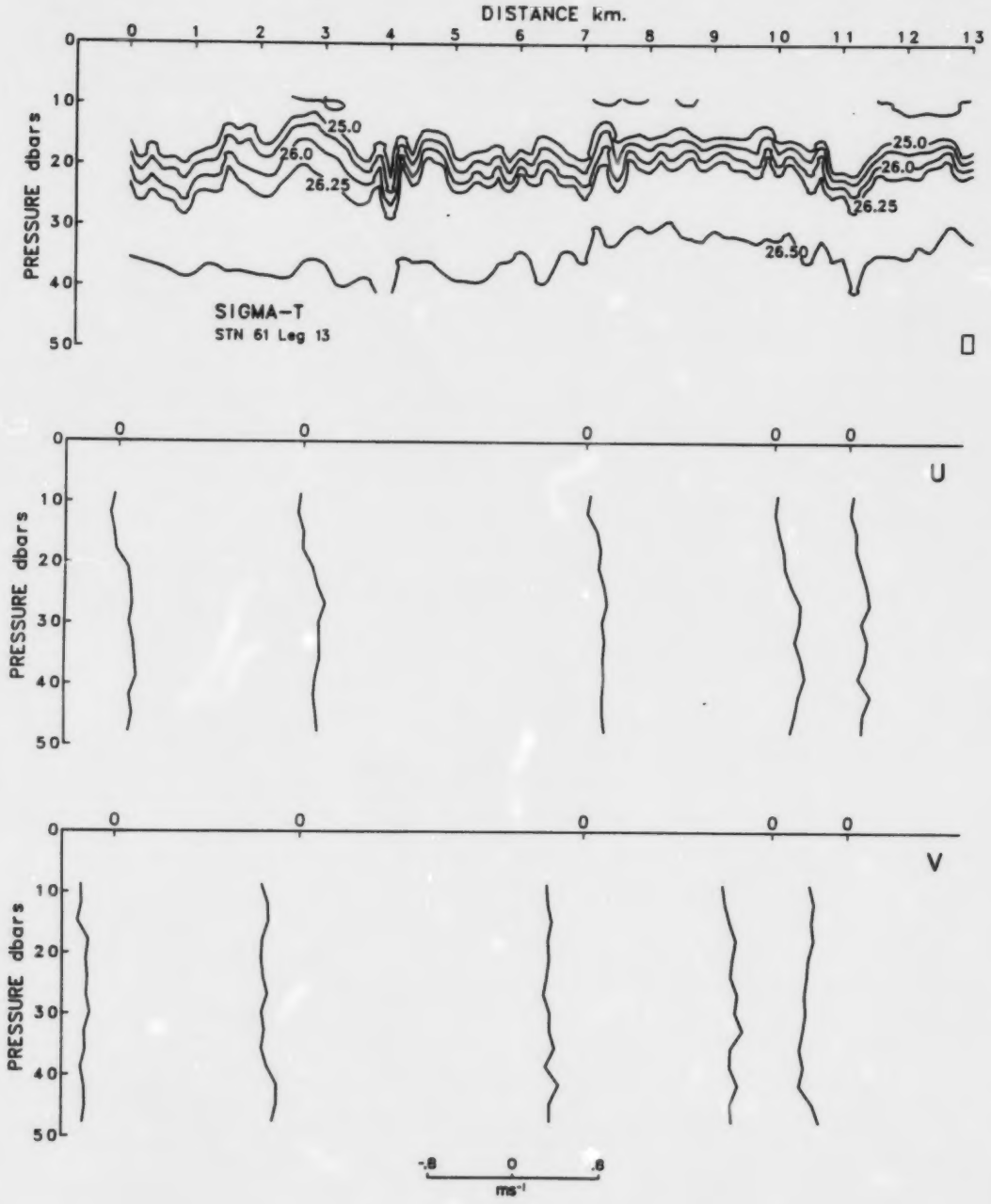

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
25.0
26.0
26.25
26.30
SIGMA-T
STN 61 Leg 13
U
V
-.8 0 .8
ms⁻¹

Fig. 419

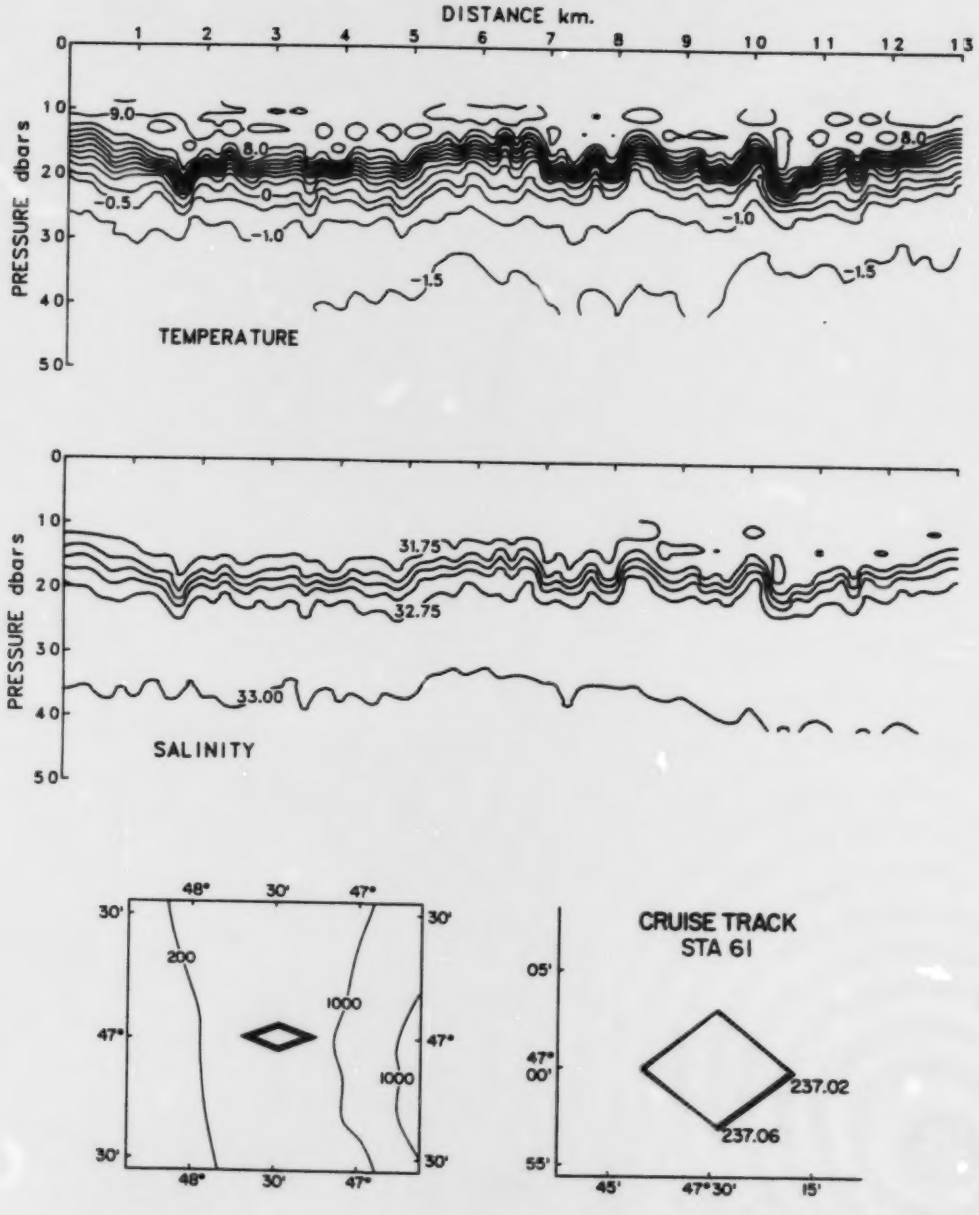

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
-0.5
0
-1.0
-1.5
TEMPERATURE
31.75
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 61
237.02
237.06
05'
47° 00'
55'
45'
47°30'
15'

Fig. 420

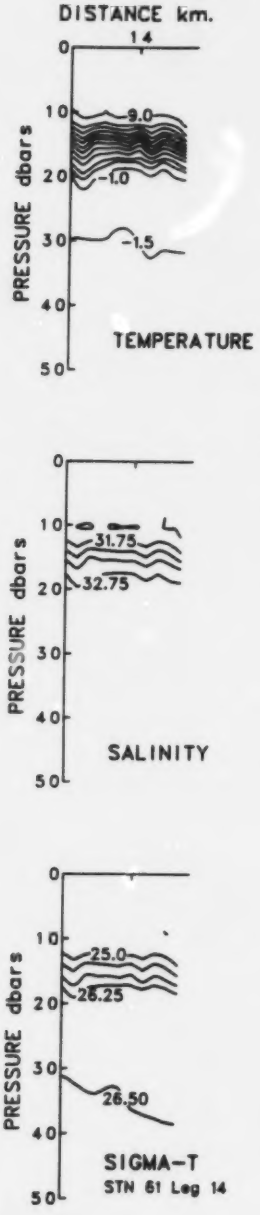

DISTANCE km.
14
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 14

Fig. 421

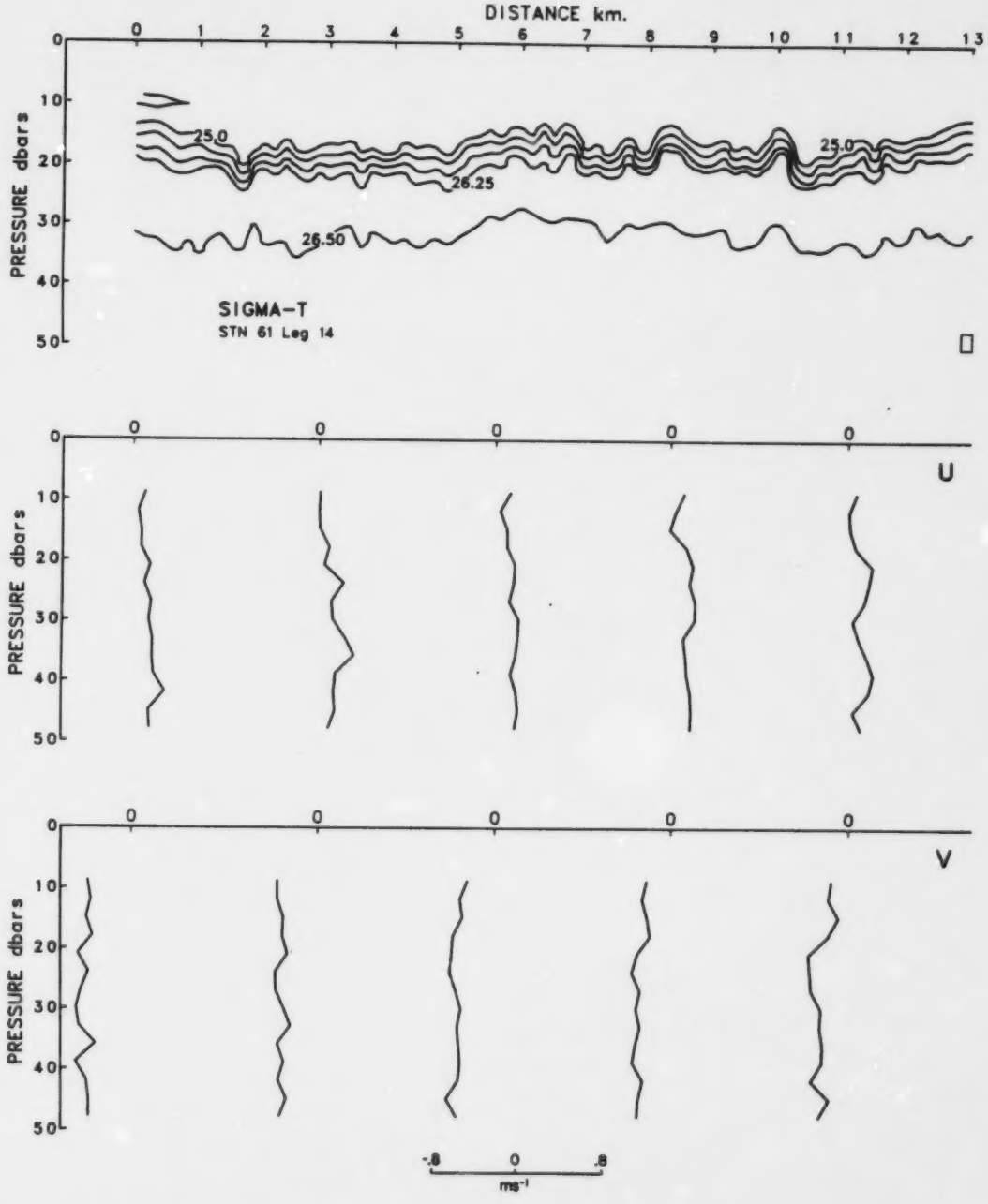

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
25.0
26.25
26.50
25.0
SIGMA-T
STN 61 Leg 14
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 422

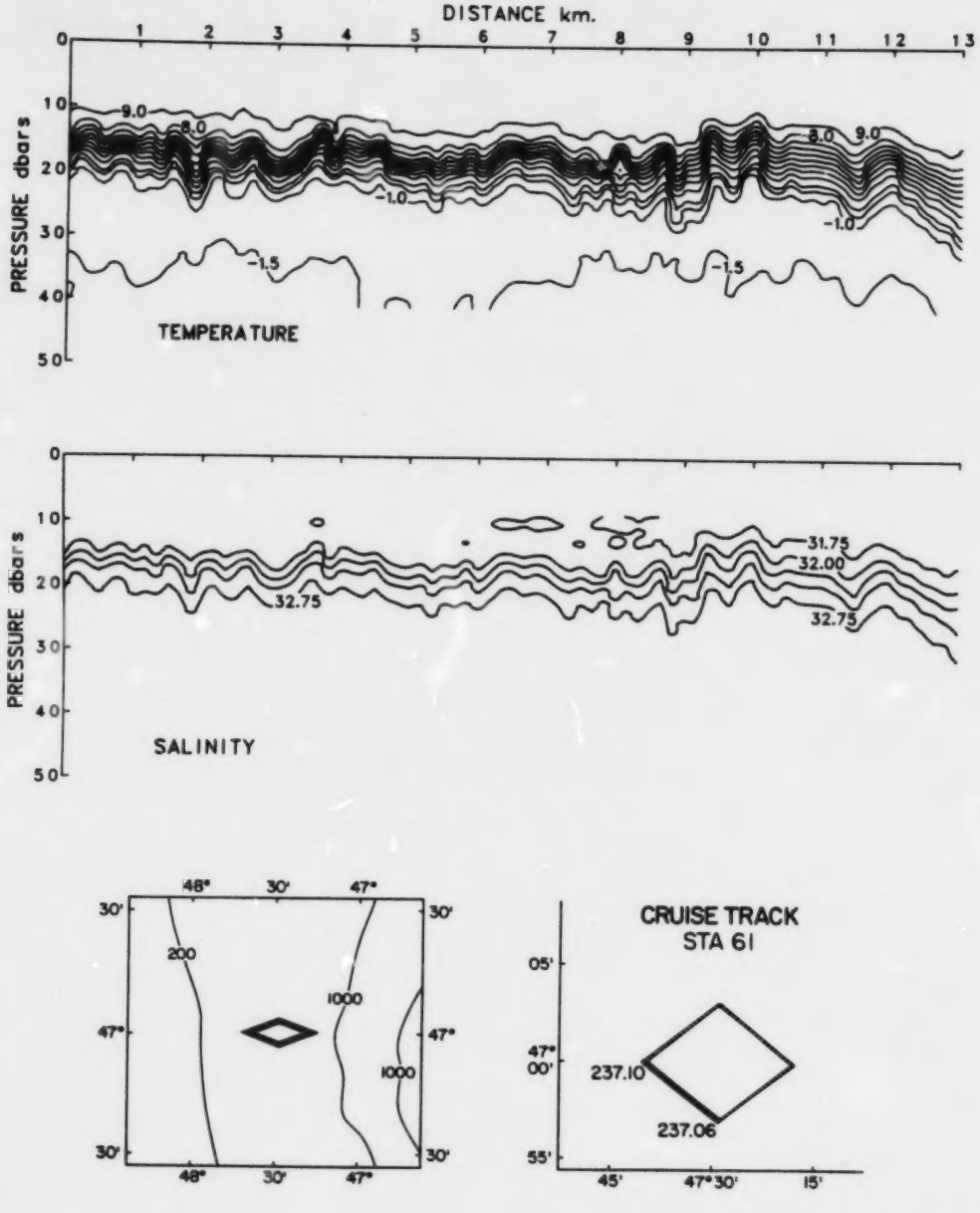
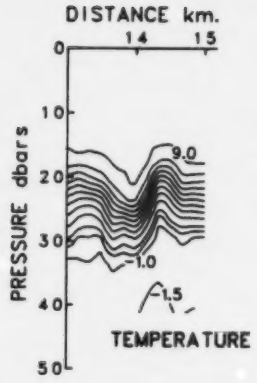

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.75
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 61
05'
47°
00'
237.10
237.06
55'
45'
47°30'
15'

Fig. 423


DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
1.0
1.5
TEMPERATURE

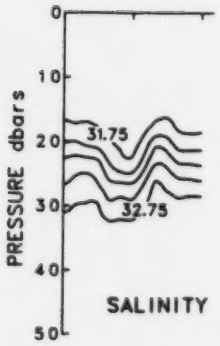

0
10
20
30
40
50
PRESSURE dbars
31.75
32.75
SALINITY

Fig. 424

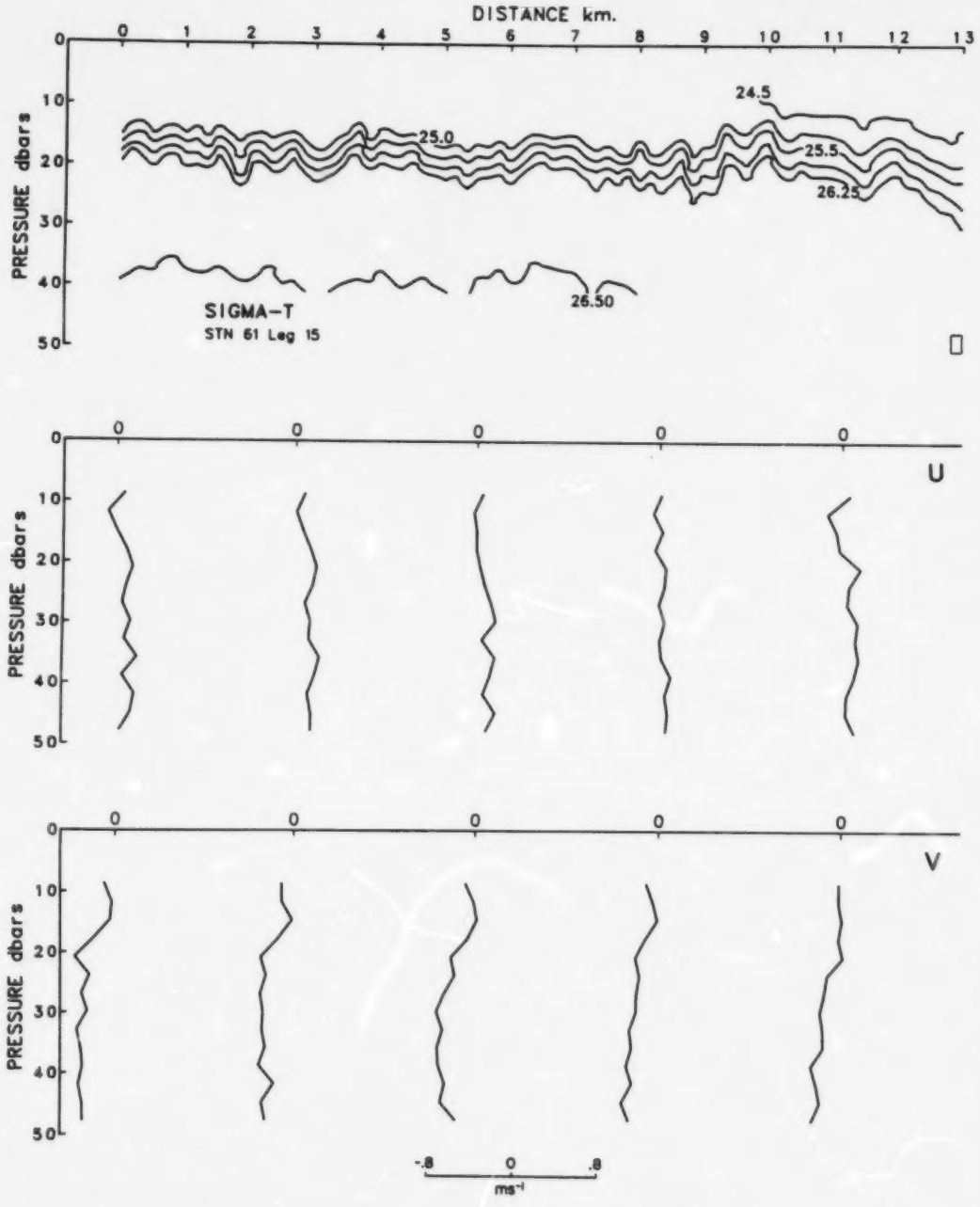

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
25.5
26.25
26.50
SIGMA-T
STN 61 Leg 15
U
V
0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 425

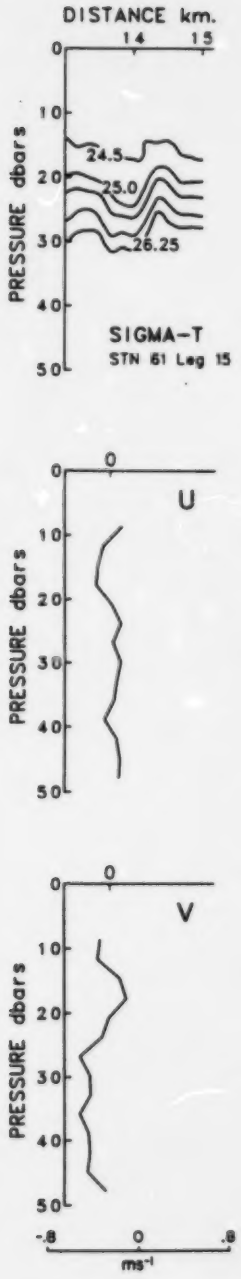

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
24.5
25.0
26.25
SIGMA-T
STN 61 Leg 15
0
U
0
V
-.8
0
.8
ms⁻¹

Fig. 426

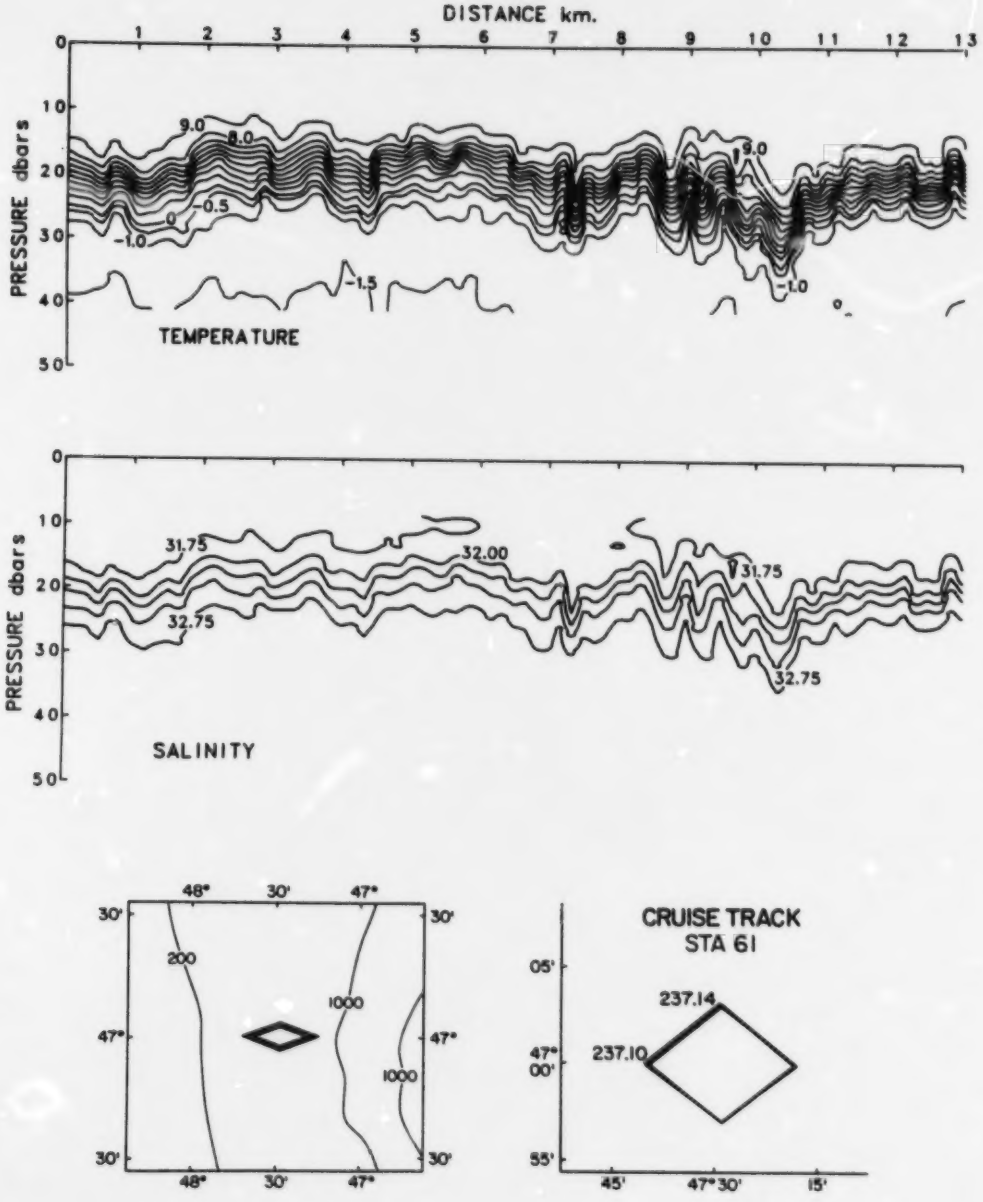

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
9.0
8.0
0
-0.5
-1.0
-1.5
TEMPERATURE
31.75
32.00
32.75
SALINITY
48° 30' 47°
30'
47°
200
1000
CRUISE TRACK
STA 61
237.14
237.10
05'
47° 00'
55'
45' 47° 30' 15'

Fig. 427

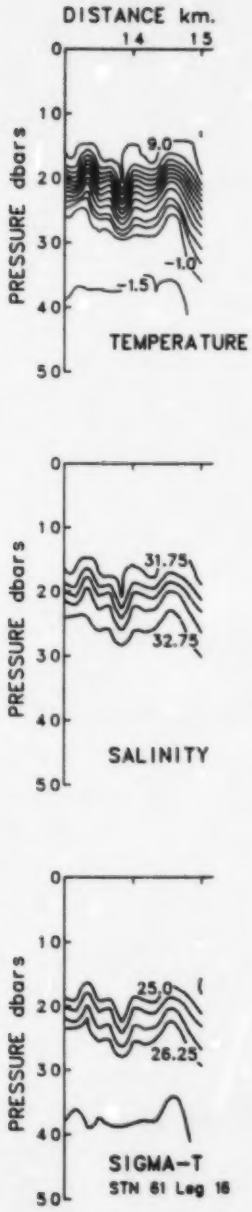

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.25
SIGMA-T
STN 61 Leg 18

Fig. 428

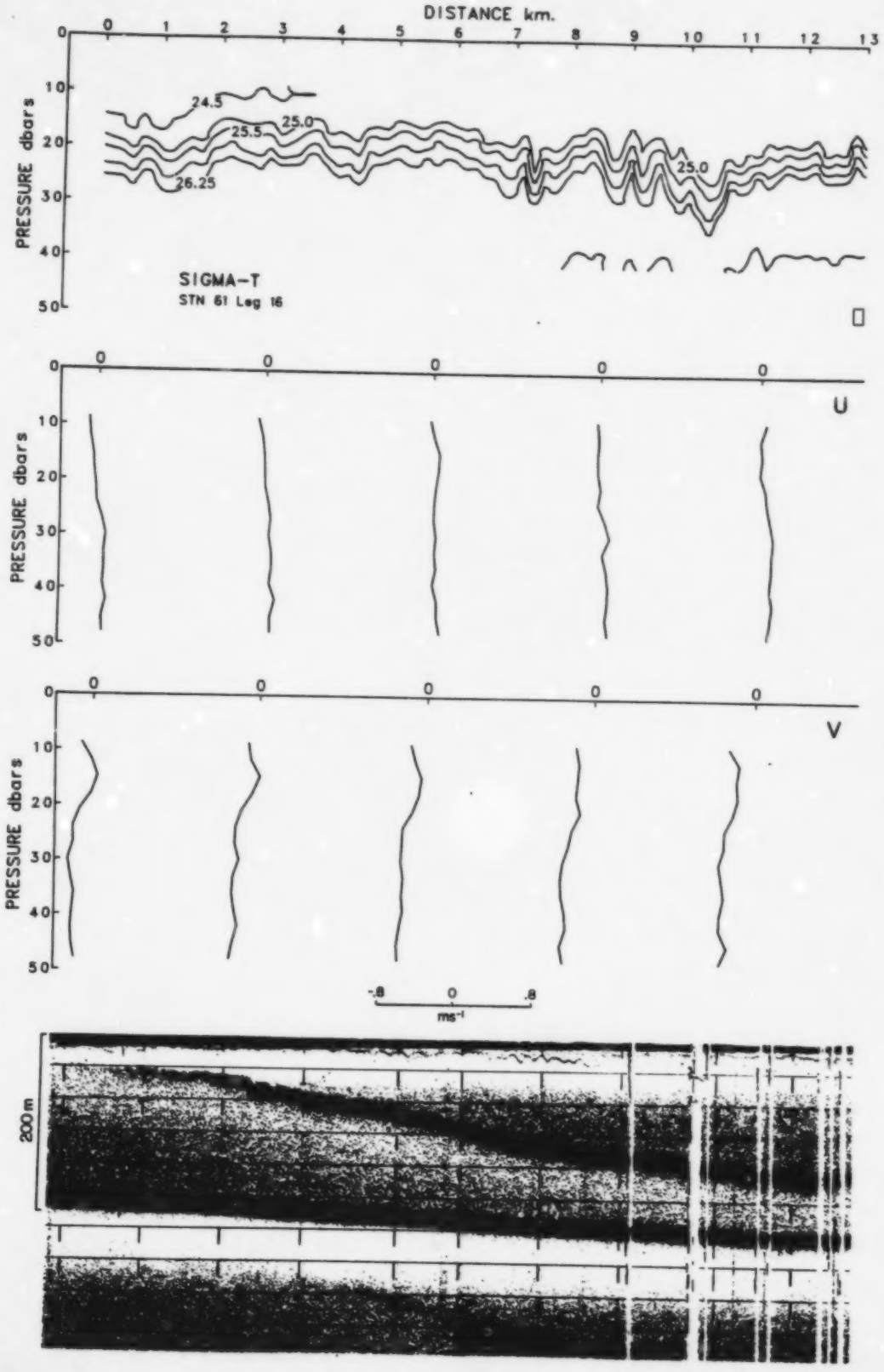

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.5
25.0
26.25
25.0
SIGMA-T
STN 61 Leg 16
U
V
-.8 0 .8
ms⁻¹
200m

Fig. 429

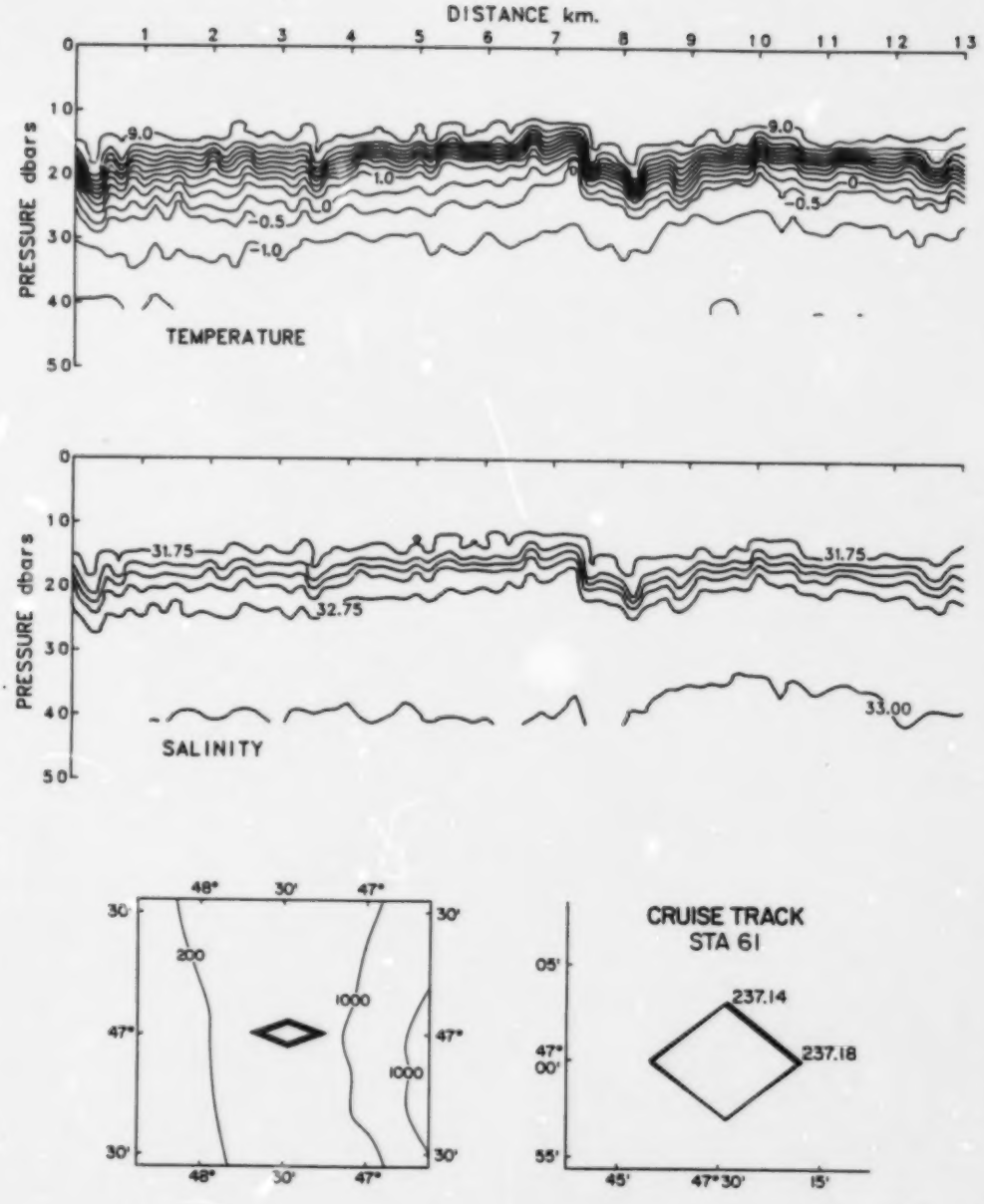

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
9.0
1.0
0
-0.5
-1.0
TEMPERATURE
31.75
32.75
33.00
SALINITY
48° 30' 47°
30'
47°
200
1000
CRUISE TRACK
STA 61
237.14
237.18
05'
47° 00'
55'
45' 47° 30' 15'

Fig. 430

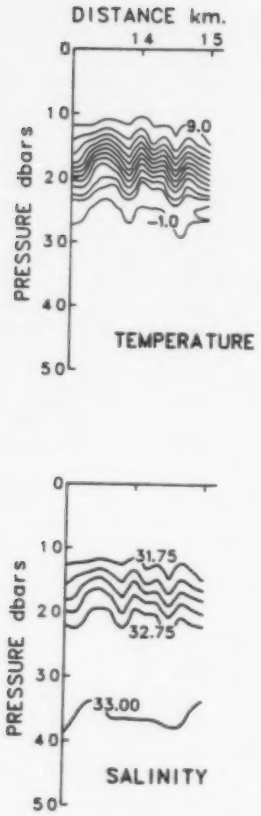

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
TEMPERATURE
0
10
20
30
40
50
PRESSURE dbars
31.75
32.75
33.00
SALINITY

Fig. 431

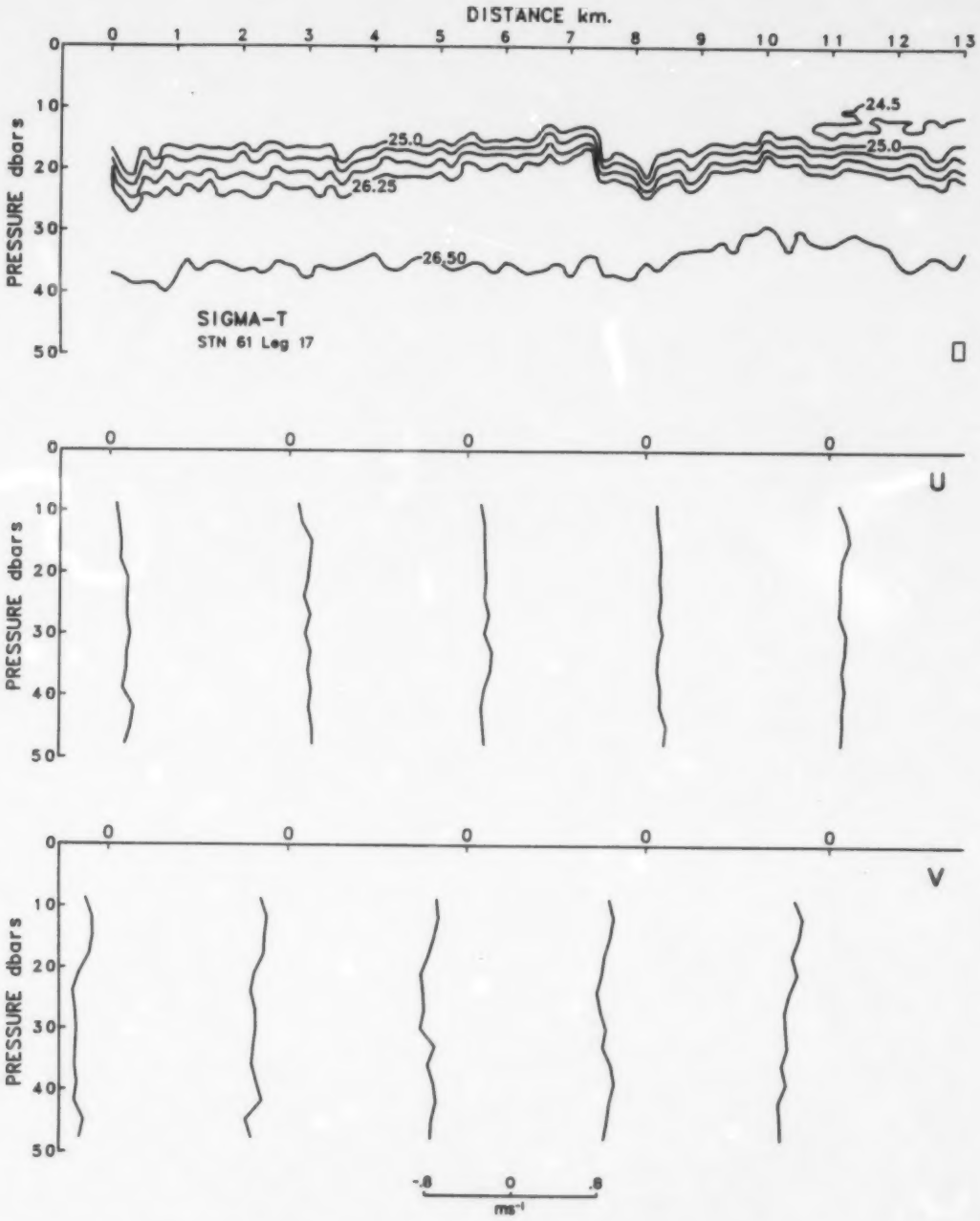

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
25.0
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 17
U
V
-.8 0 .8
ms⁻¹

Fig. 432

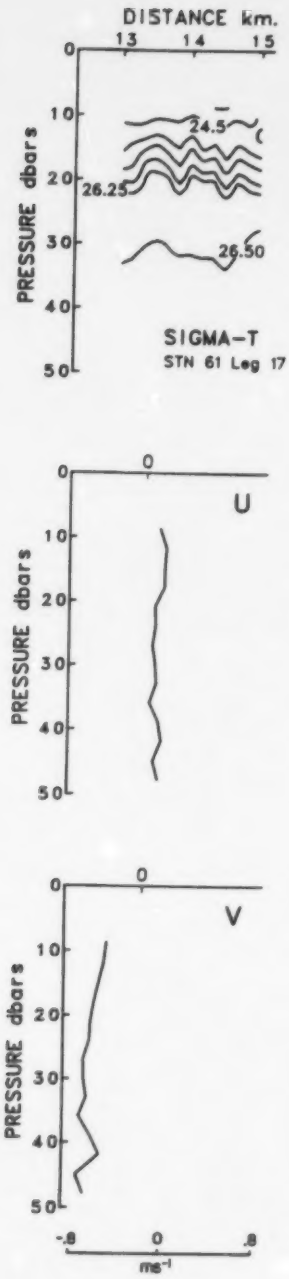

DISTANCE km.
13
14
15
0
10
20
30
40
50
PRESSURE dbars
24.5
26.25
26.50
SIGMA-T
STN 61 Leg 17
0
U
PRESSURE dbars
0
V
PRESSURE dbars
-.8
0
.8
ms⁻¹

Fig. 433

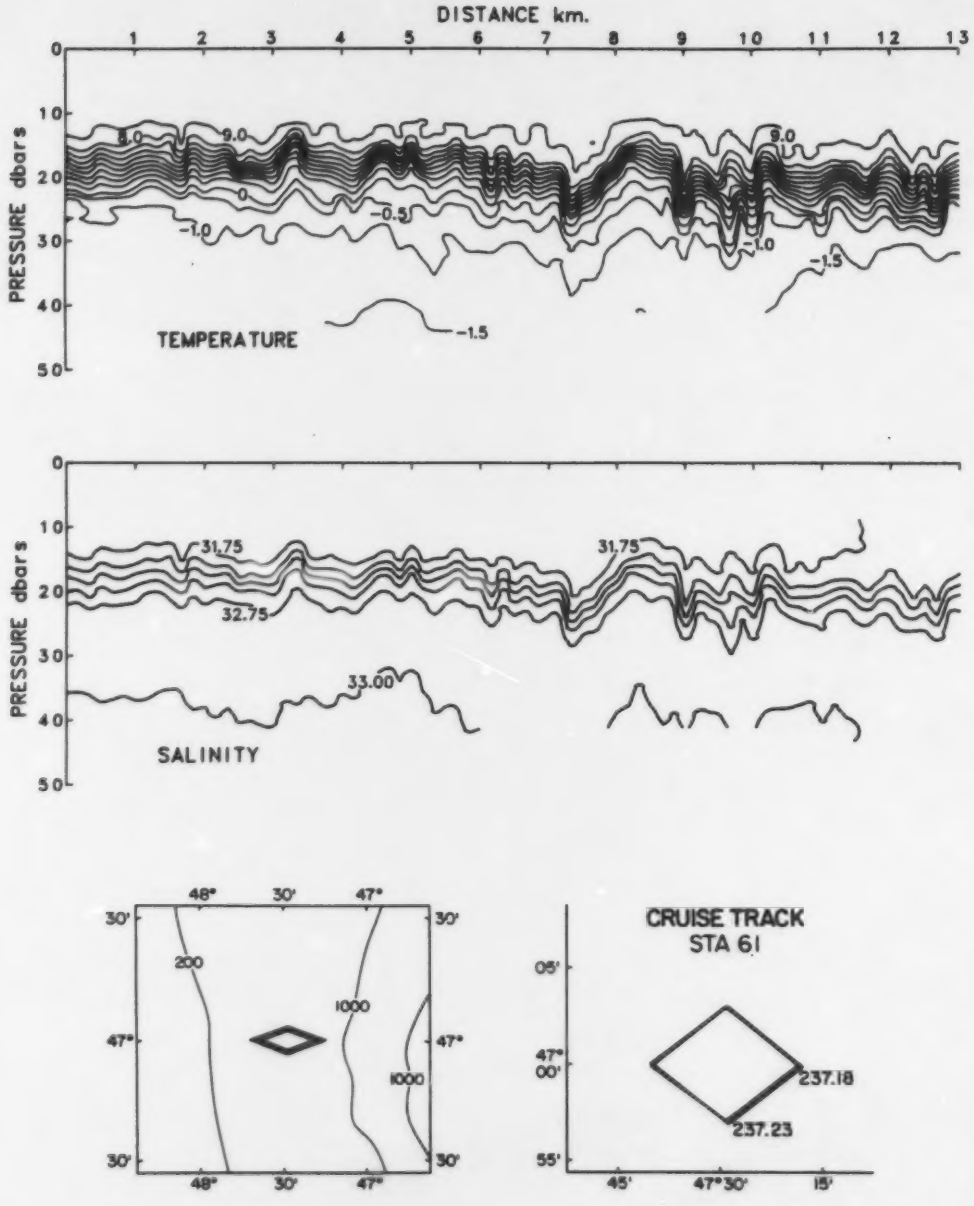

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
8.0
9.0
0
-0.5
-1.0
-1.5
TEMPERATURE
31.75
32.75
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 61
05'
47° 00'
55'
45'
47°30'
15'
237.18
237.23

Fig. 434

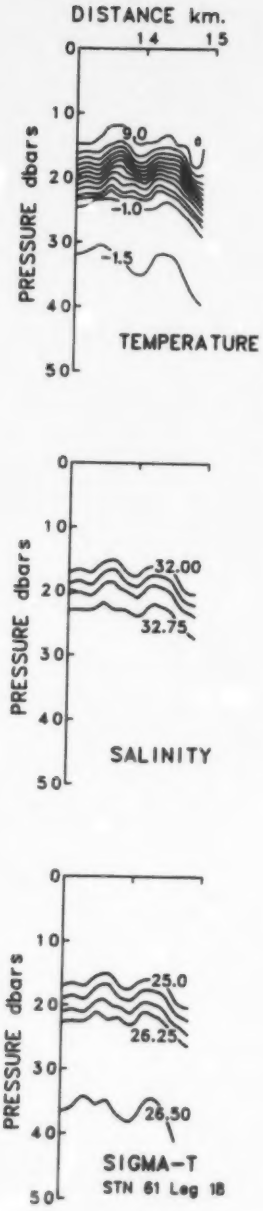

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
32.00
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 18

Fig. 435

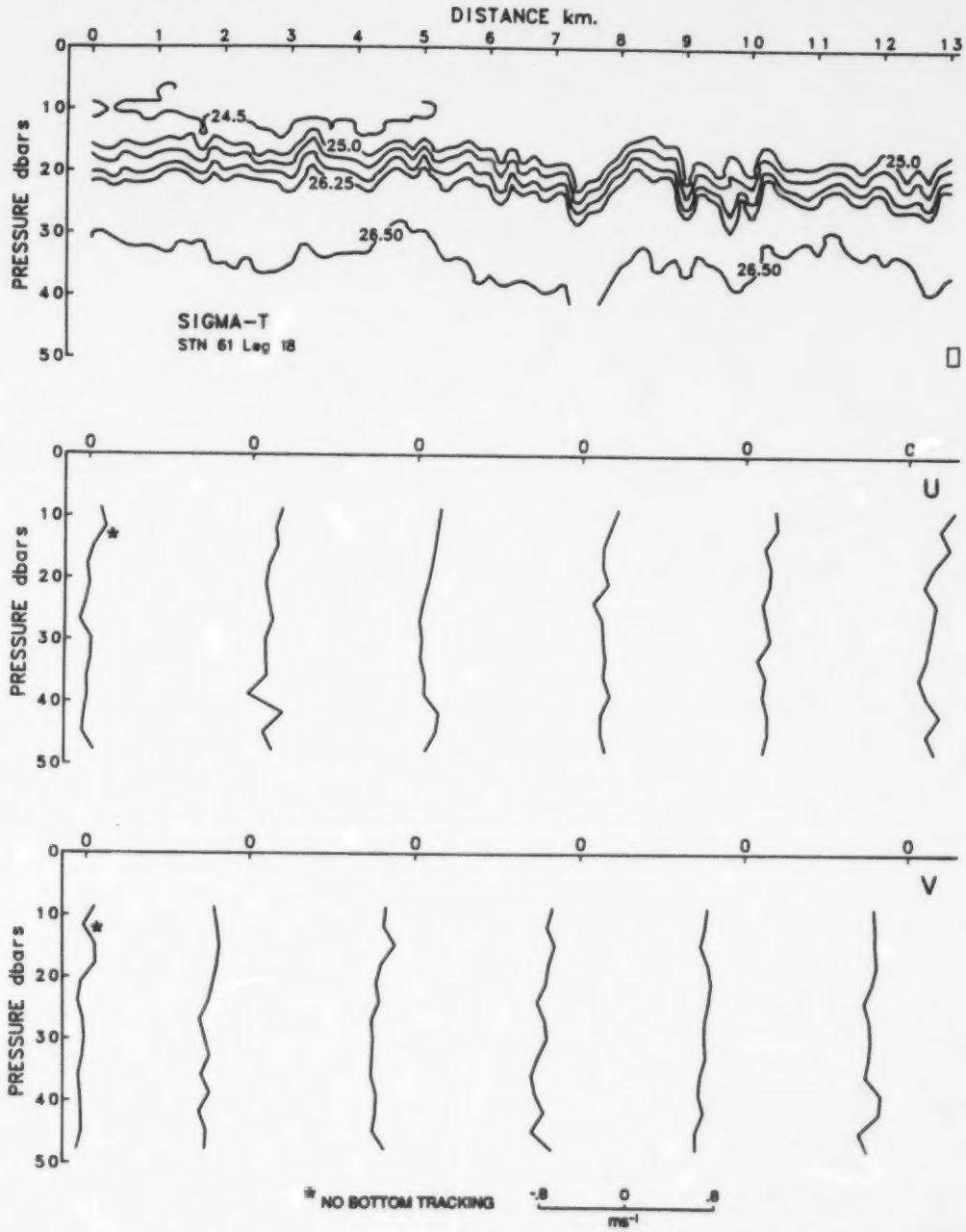

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
24.5
25.0
26.25
26.50
25.0
26.50
SIGMA-T
STN 61 Leg 18
U
V
* NO BOTTOM TRACKING
-.8 0 .8
ms⁻¹

Fig. 43b

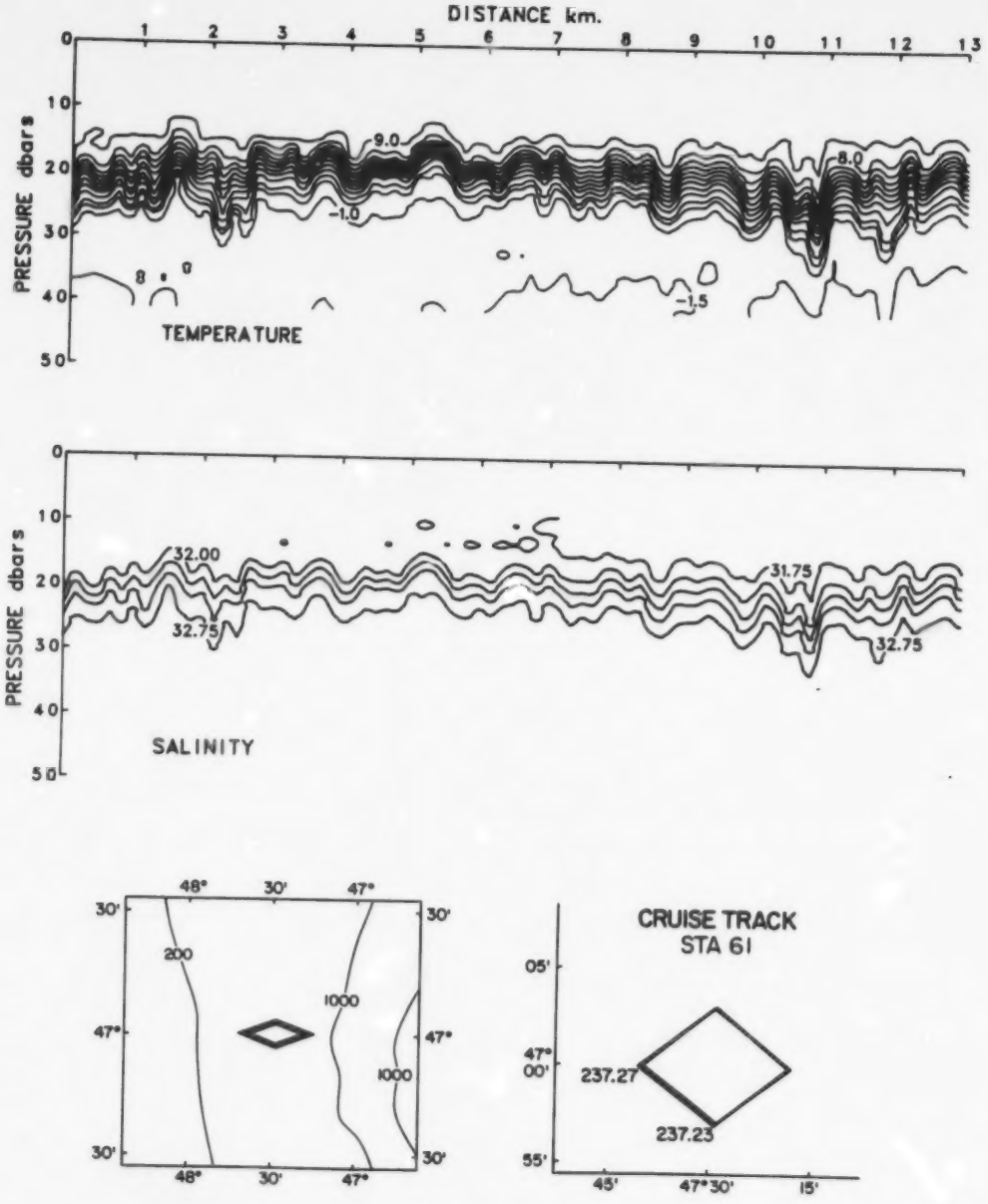

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
8.0
-1.0
8.0
-1.5
TEMPERATURE
32.00
31.75
32.75
32.75
SALINITY
48°
30'
47°
200
1000
1000
CRUISE TRACK
STA 61
05'
47°
00'
237.27
237.23
55'
45'
47°30'
15'

Fig. 437

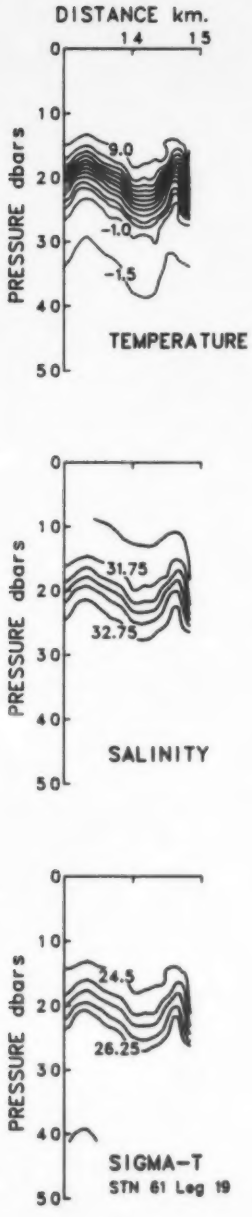

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
24.5
26.25
SIGMA-T
STN 61 Leg 19

Fig. 438

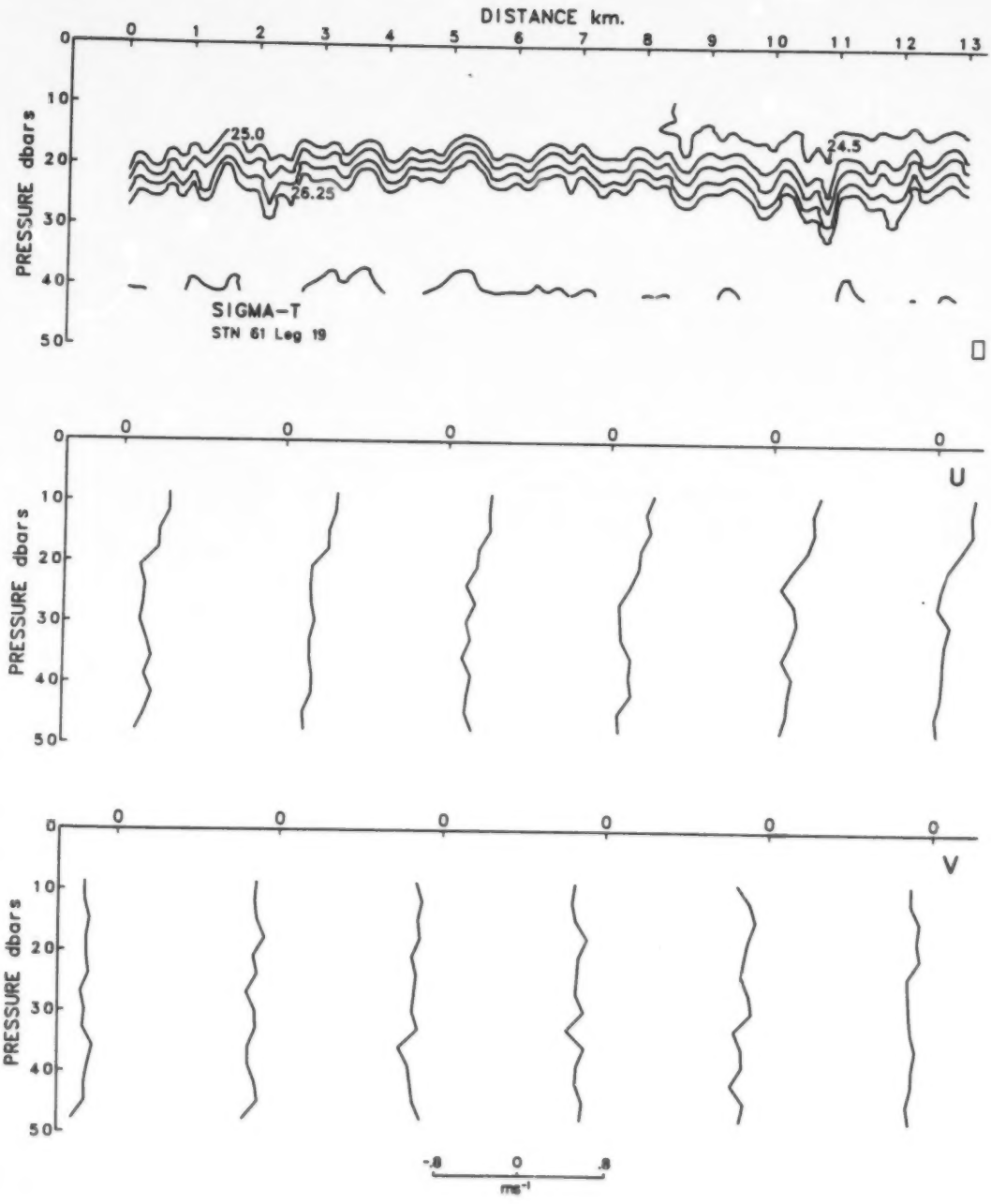

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
26.25
24.5
SIGMA-T
STN 61 Leg 19
U
V
-.8 0 .8
ms⁻¹

Fig. 439

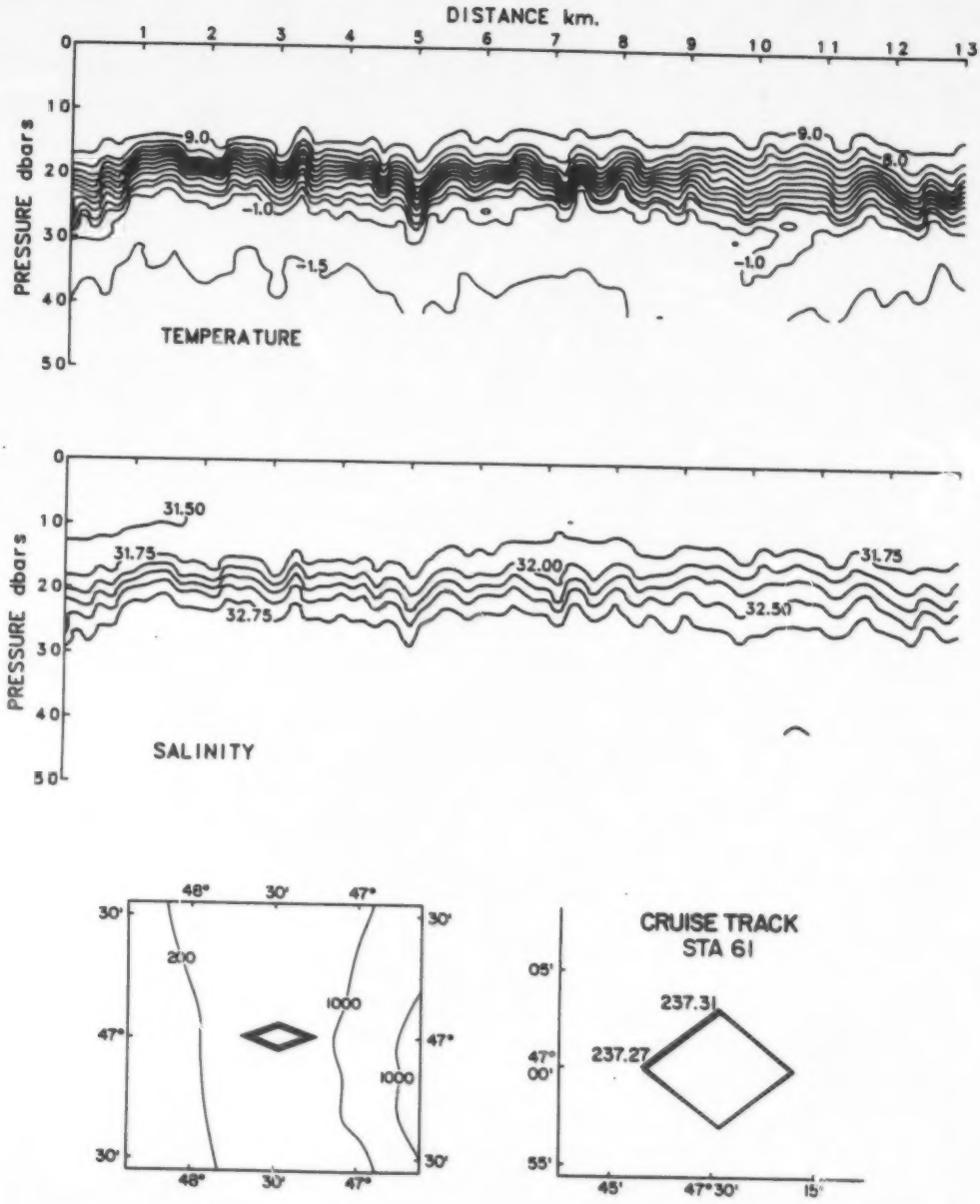

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
-1.0
-1.5
9.0
8.0
-1.0
TEMPERATURE
0
10
20
30
40
50
31.50
31.75
32.75
32.00
31.75
32.50
PRESSURE dbars
SALINITY
48°
30'
47°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°
CRUISE TRACK
STA 61
05'
237.31
237.27
47°
00'
55'
45'
47°30'
15'

Fig. 440

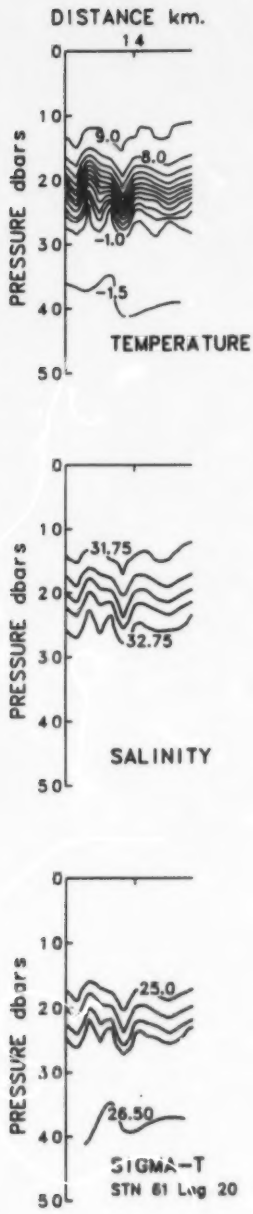

DISTANCE km.
14
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-1.0
-1.5
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.50
SIGMA-T
STN 61 Lvg 20

Fig. 441

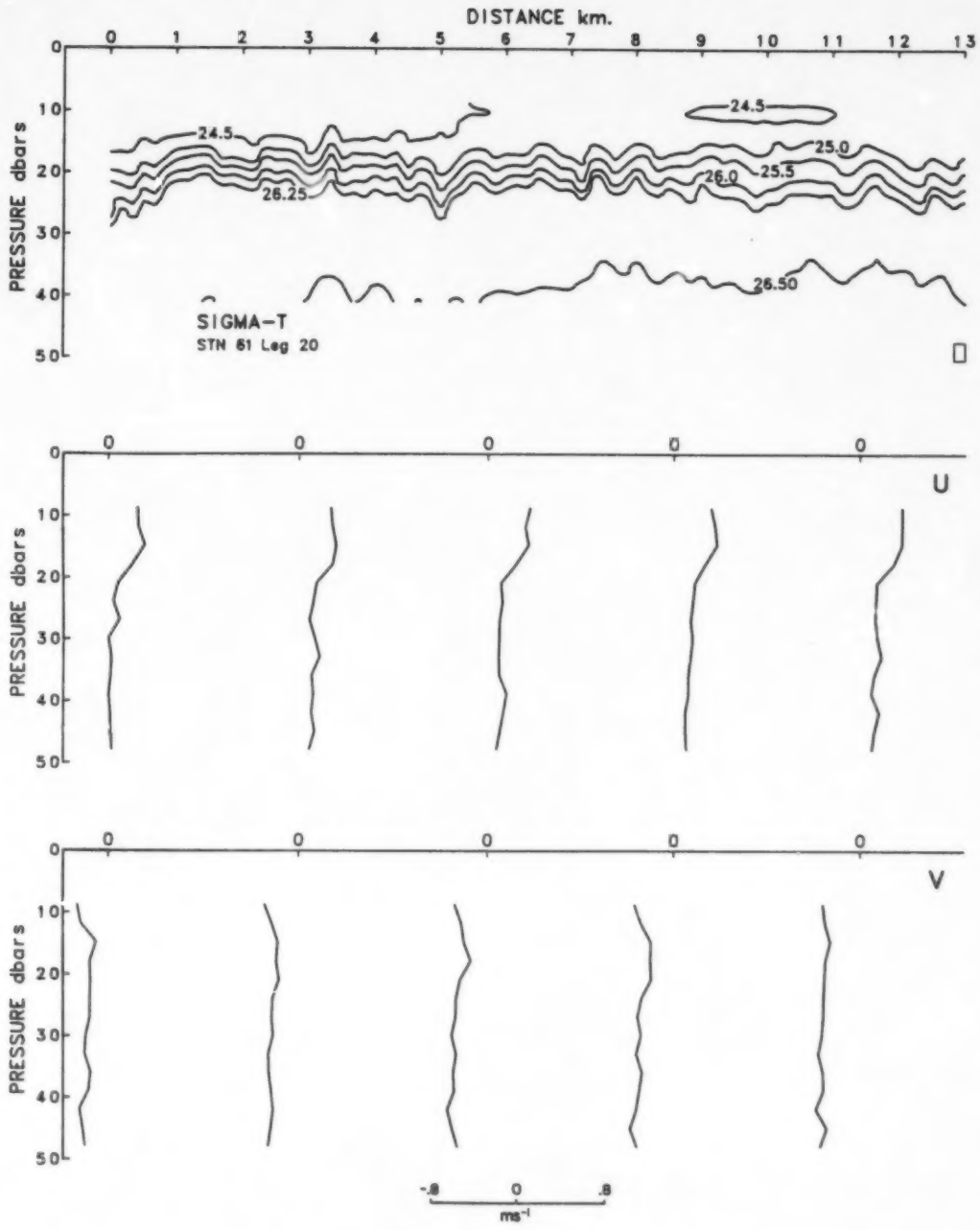
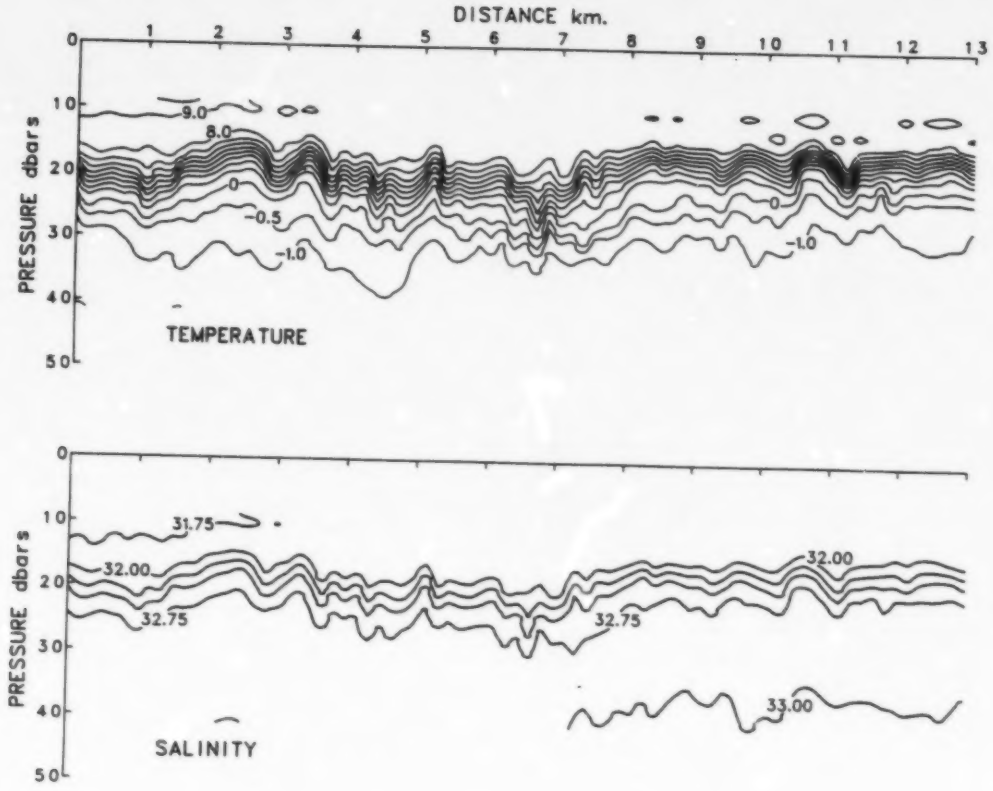

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
24.5
24.5
25.0
25.5
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 20
U
V
-.8 0 .8
ms⁻¹

Fig. 442


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
9.0
8.0
0
-0.5
-1.0
-1.0
TEMPERATURE
PRESSURE dbars
10 20 30 40 50
31.75
32.00
32.75
32.00
32.75
33.00
SALINITY

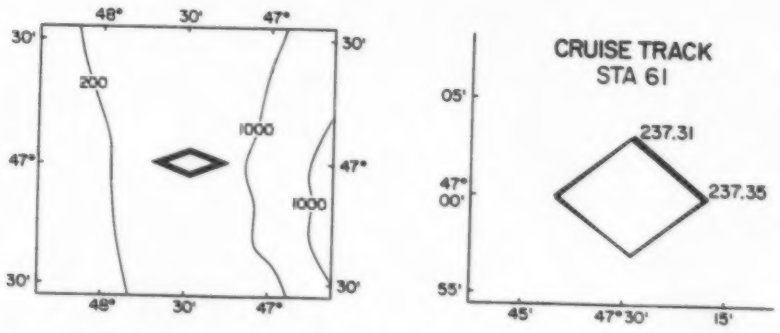

48° 30' 47°
30'
47°
30'
200
1000
1000
CRUISE TRACK
STA 61
05'
237.31
47° 00'
237.35
55'
45' 47°30' 15'

Fig. 443

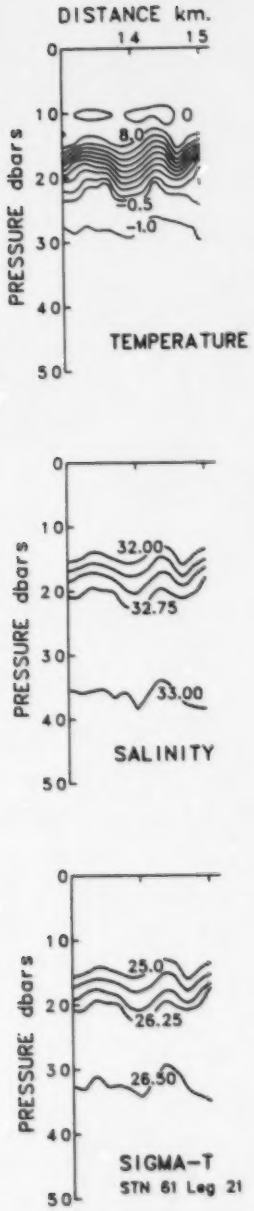

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
0
8.0
-0.5
-1.0
TEMPERATURE
32.00
32.75
33.00
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 81 Leg 21

Fig. 444

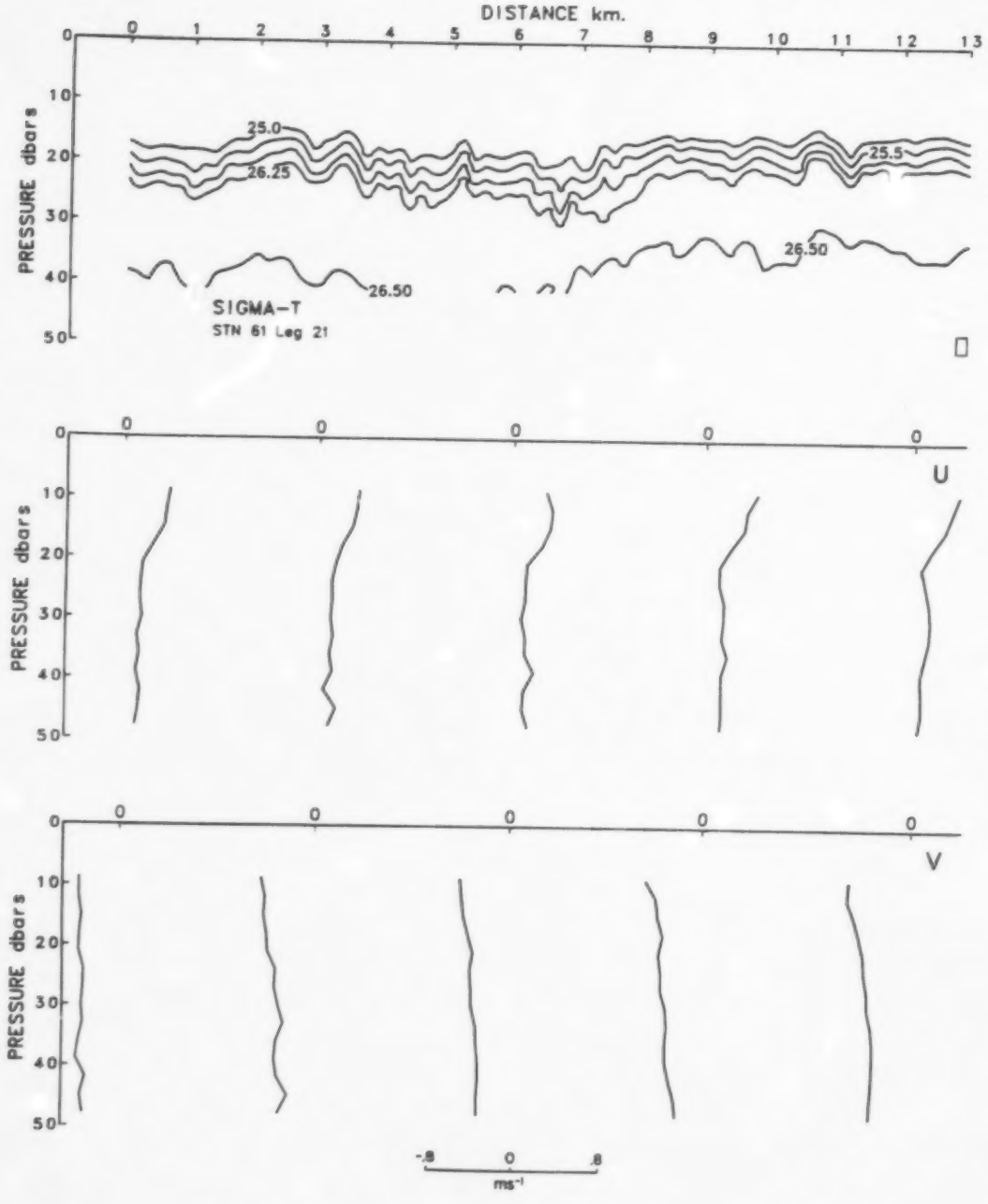

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10 20 30 40 50
25.0
26.25
25.5
26.50
26.50
SIGMA-T
STN 61 Leg 21
0 0 0 0 0
U
V
-.8 0 .8
ms⁻¹

Fig. 445

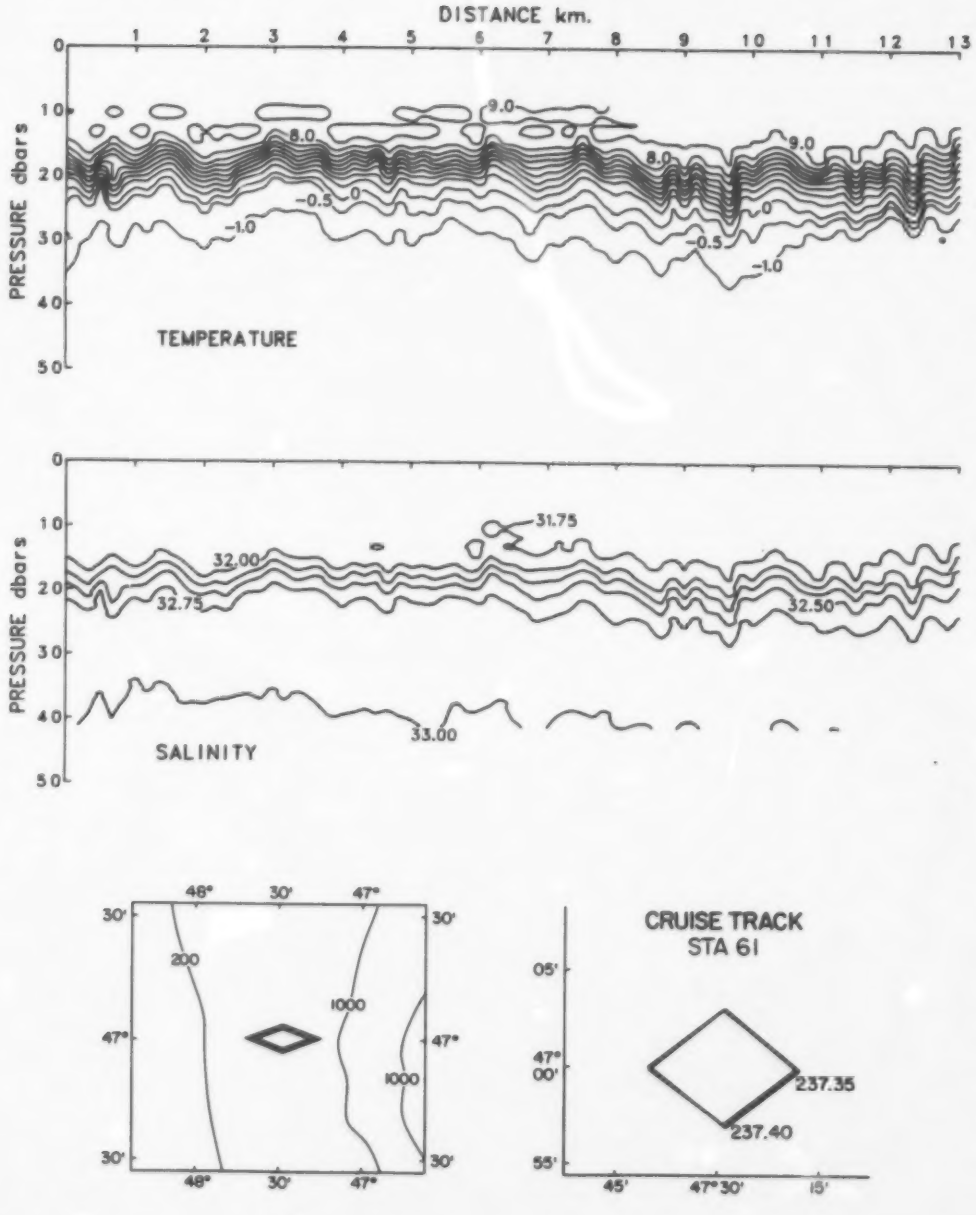

DISTANCE km.
1 2 3 4 5 6 7 8 9 10 11 12 13
0
10
20
30
40
50
PRESSURE dbars
9.0
8.0
-0.5
0
-1.0
TEMPERATURE
31.75
32.00
32.75
32.50
33.00
SALINITY
48°
30'
47°
200
1000
CRUISE TRACK
STA 61
05'
47° 00'
55'
237.35
237.40
45'
47° 30'
15'

Fig. 446

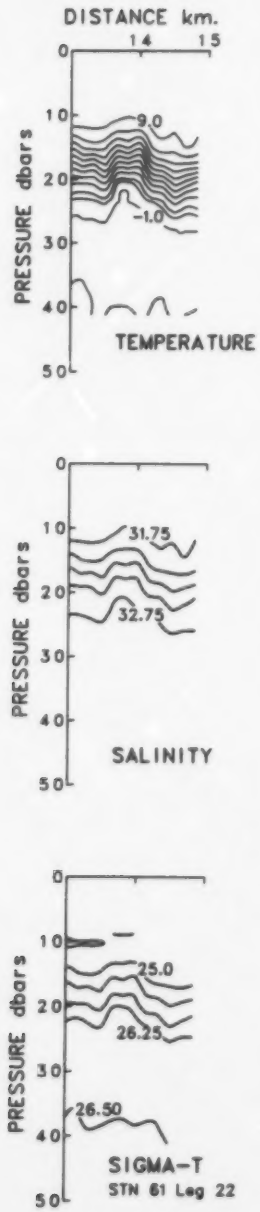

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
TEMPERATURE
31.75
32.75
SALINITY
25.0
26.25
26.50
SIGMA-T
STN 61 Leg 22

Fig. 447

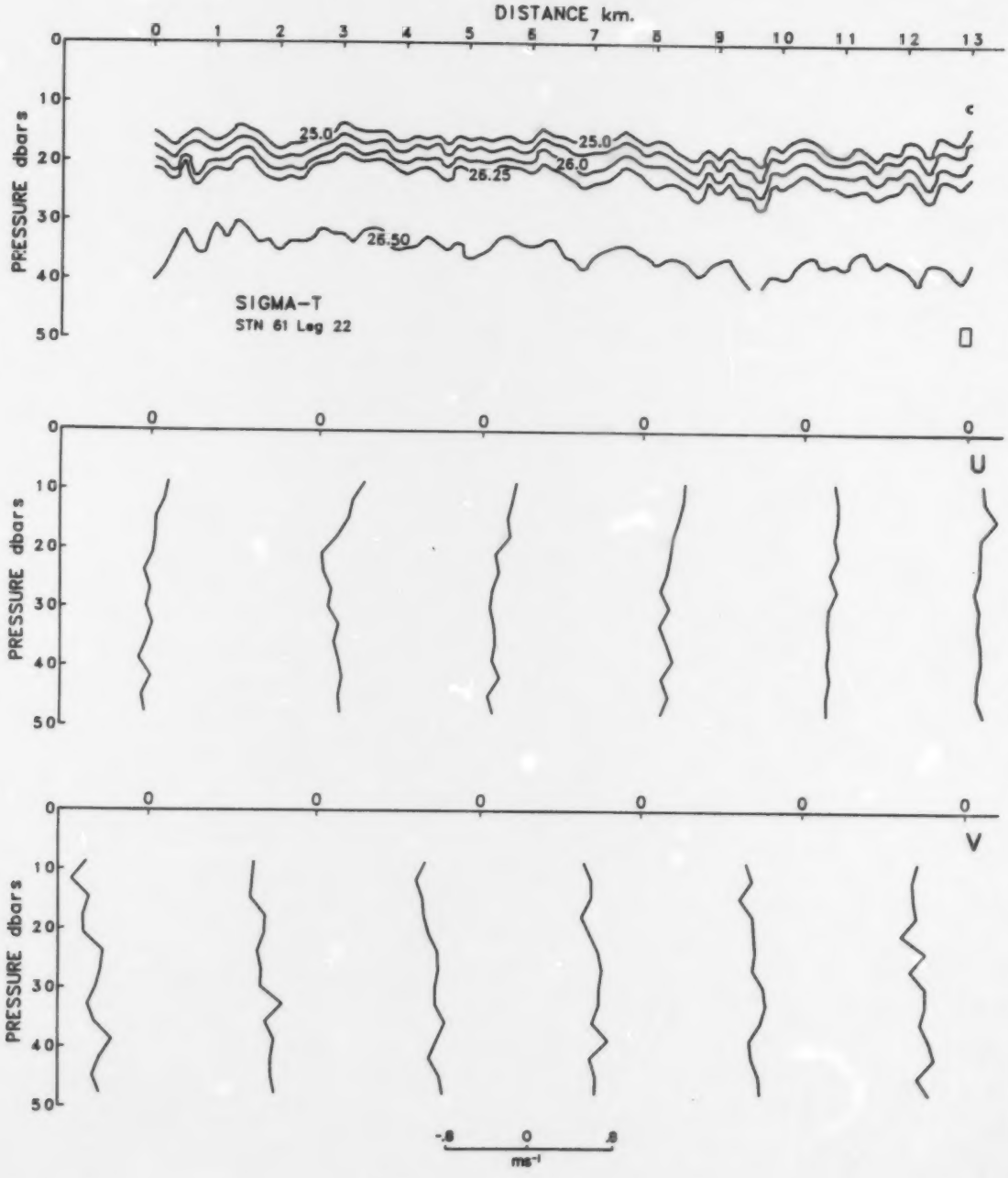
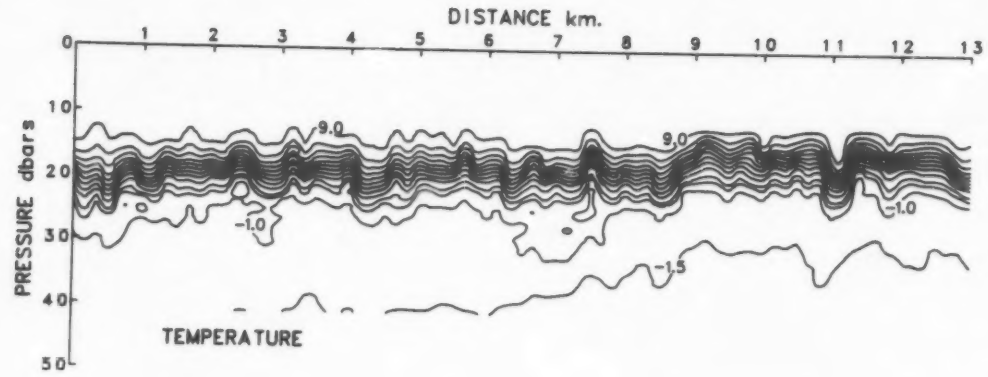
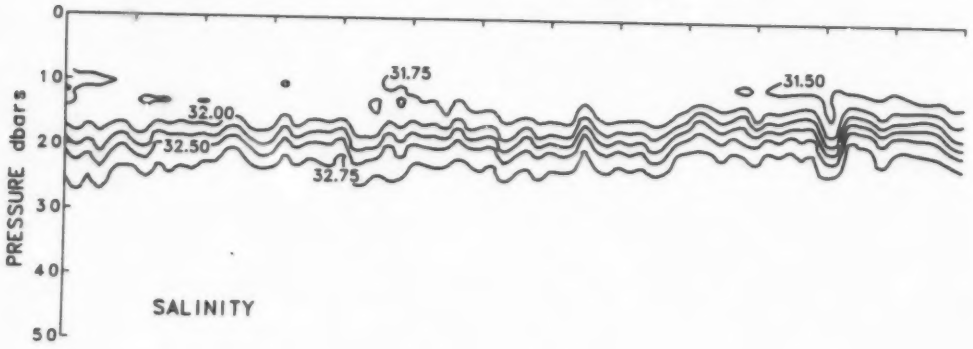
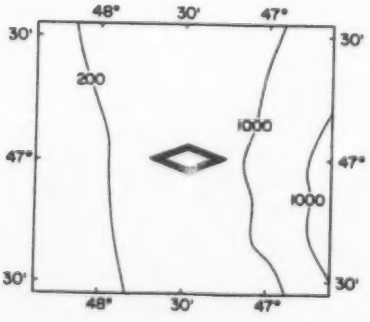

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
0 10 20 30 40 50
c
25.0
25.0
26.0
26.25
26.50
SIGMA-T
STN 61 Leg 22
U
V
0 0 0 0 0 0
-.8 0 .8
ms⁻¹

Fig. 448


DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
9.0
9.0
-1.0
-1.0
-1.5
TEMPERATURE


0
10
20
30
40
50
PRESSURE dbars
31.75
31.50
32.00
32.50
32.75
SALINITY


48°
30'
47°
30'
47°
30'
200
1000
1000
47°
30'
48°
30'
47°

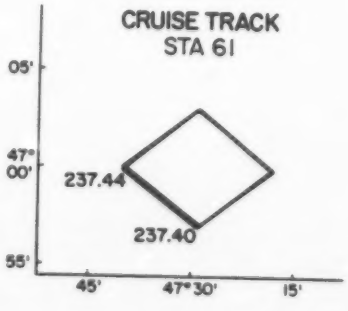

CRUISE TRACK
STA 61
05'
47°
00'
237.44
237.40
55'
45'
47°30'
15'

Fig. 449

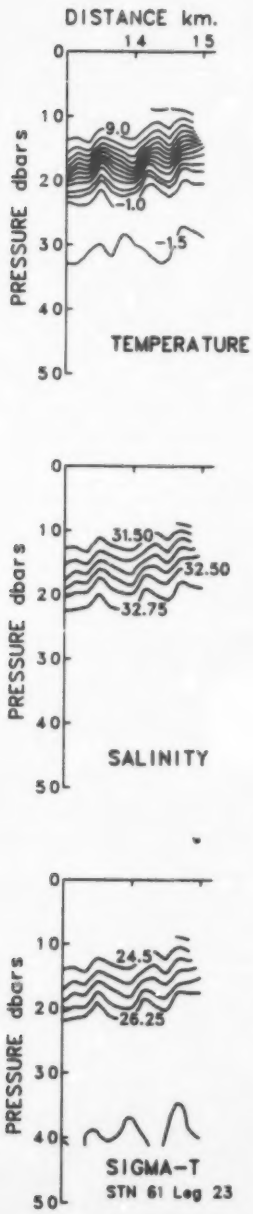

DISTANCE km.
14
15
0
10
20
30
40
50
PRESSURE dbars
9.0
-1.0
-1.5
TEMPERATURE
31.50
32.50
32.75
SALINITY
24.5
26.25
SIGMA-T
STN 61 Leg 23

Fig. 450

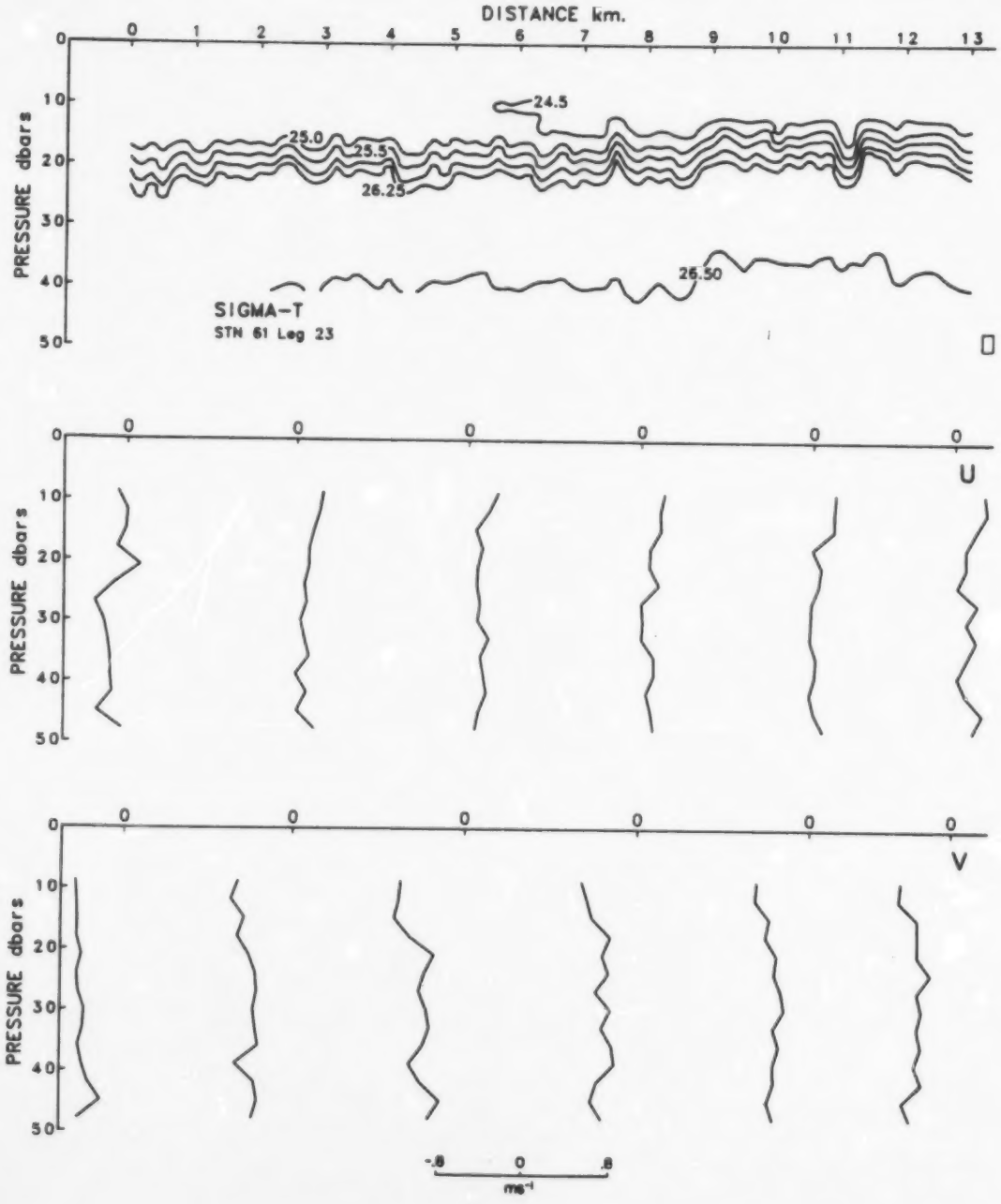

DISTANCE km.
0 1 2 3 4 5 6 7 8 9 10 11 12 13
PRESSURE dbars
10
20
30
40
50
24.5
25.0
25.5
26.25
26.50
SIGMA-T
STN 61 Leg 23
U
V
-.8 0 .8
ms⁻¹

Fig. 451